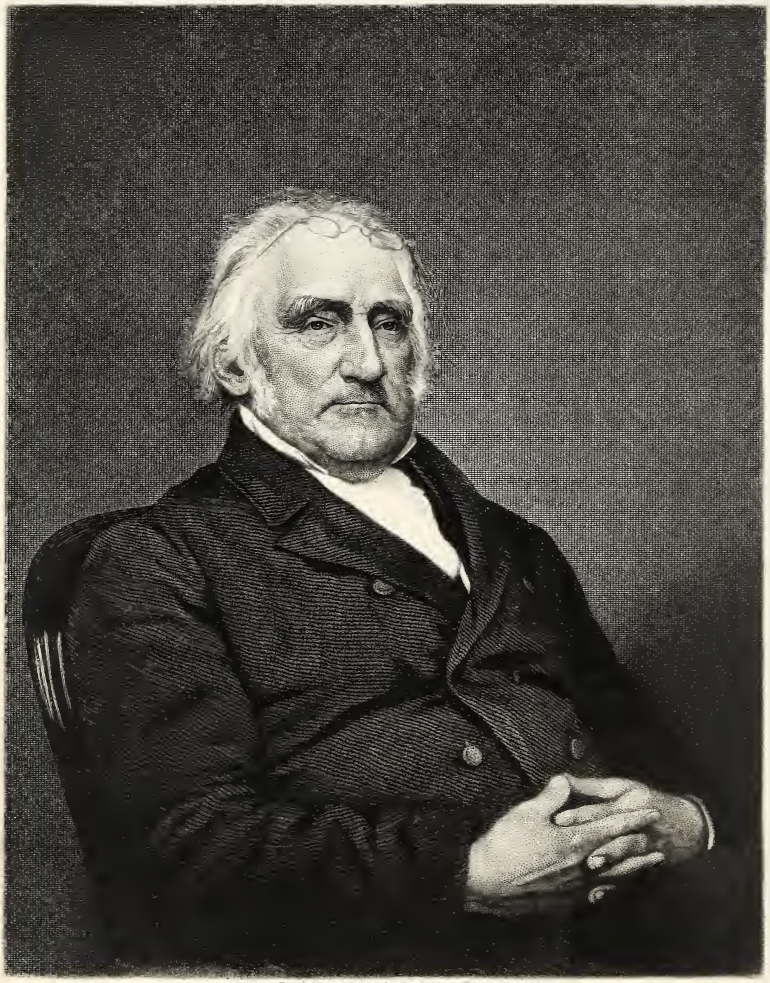
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NEW SERIES.

With the number for March, 1862, we shall commence a New Series of the American Journal of Education, and with a moderate encouragement from the thoughtful and active friends of educational improvement, we shall continue our quarterly issues, until they have reached at least five volumes. We shall make no change in the general plan of this periodical. It will be devoted as from the start, exclusively to the History, Biography, Science, Art, Systems, Institutions, and Statistics of Education in different countries, with special reference to the condition and wants of our own. We shall studiously avoid the insertion of all papers foreign to these great subjects, or of a single line or word calculated to injure the feelings of any faithful laborer in any allotment of the great field of American Education. We leave the work of controversy to those who have more taste for it than we have, and shall labor diligently on the following points.

I. The History of Pedagogy, or the successive developments of human culture, both theoretical and practical, under the varying circumstances of race, climate, religion and government, as drawn from special treatises of teachers and educators in different languages, or as embodied in the manners, literature and history of each people.

In the development of this great theme, embracing many ages, races, and governments, we propose, not in precise chronological or ethnological order, but in papers prepared, from time to time, as our studies or those of our co-laborers may suggest, to show, to an extent which has not yet been attempted in the English language, what has been accomplished in the family and schools, by parents, teachers and educators, for the systematic training of children and youth :—

1. In the Eastern nations, before the birth of Christ—in China, India, Persia, Egypt, and Palestine—by Confucius, by the Vedas and Buddha, by Zoroaster and the Ptolemies, by Moses, David, Solomon, and the Rabbi.

2. Among the Greeks, at Crete, Sparta and Athens, under the institutions of Pythagoras, Lycurgus, and Solon, by poets and philosophers and teachers, by Homer, Socrates, Plato, Aristotle, and Plutarch.

3. Among the Romans, in the infancy, maturity and old age of Rome, by the didactics of Cato Seneca, Tacitus, the Plinys, Quintillian and Lucian.

4. Among modern nations as reached by the teachi[illegible] Christianity, in the gradual unfolding of the present received ideas [illegible]ho[illegible]ni-zation, and of the principles and methods of instruction,—[illegible]ugh[illegible]he peculiar organization and distinctive teaching of the earl[illegible]ristians; (*b*) the first popular school of the Christian Fathers, Chry[illegible]tom and Basil; (*c*) the Catechist schools of Clement and Origen; (*d*) [illegible]e seminaries and cloister schools of Tertullian, Cyprian, Jerome and A[illegible]in; (*e*) the Monastic institutions of Benedict, Dominic and Francis; (*f*) t[illegible] court schools and educational labors of Charlemagne and Alfred; (*g*) th[illegible] modifications wrought by Arabic culture which followed the incursio[illegible] of the Moors; (*h*) the rise and expansion of universities; (*i*) the deman[illegible] of chivalry for a culture for man and woman distinct from that of the clergy, and of incorporated cities for schools independent of ecclesiastical authorities; (*j*) the revival of the languages, and the literature of Greece and Rome; (*k*) the long-protracted struggle between Humanism and Realism, or between, on the one hand, the study of languages for the purposes of general culture and the only preparation for professions in which language was the great instrument of study and influence, and on the other, the claims of Science, and of the realities surrounding every one, and with which every one has to do every day, in the affairs of peace or war; (*l*) and the gradual extension and expansion of the grand idea of universal education—of the education of every human being, and of every faculty of every human being, according to the circumstances and capabilities of each. While thus aiming to give in each number, contributions to the History of Pedagogy and the internal economy of schools, we hope in this series to complete our survey of—

II. Systems of National Education, and especially an account of Public Schools and other Means of Popular Education in each of the United States, and of all other governments on the American Continent.

III. The history and present condition of Normal Schools and other special institutions and agencies for the Professional Training and Improvement of Teachers.

IV. The organization and characteristic features of Polytechnic Schools, and other institutions for the education of persons destined for other pursuits than those of Law, Medicine and Theology, including a full account of Military Schools.

V. The history and courses of study of the oldest and best Colleges and Universities in different countries.

VI. The life and services of many Teachers, Promoters and Benefactors of Education, whose labors or benefactions are associated with the foundation and development of institutions, systems, and methods of instruction.

HENRY BARNARD.

Hartford, March, 1862.

THE

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[NEW SERIES, NO. 5.]

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EDUCATIONAL ADVERTISER for March, 1863.

I. AXIOMS.

Aphorisms representing a knowledge broken, do invite men to inquire farther; whereas methods carrying the show of a total, do secure men, as if they were at farthest. Bacon.

Exclusively of the abstract science, the largest and worthiest portion of our knowledge consists of Aphorisms: and the greatest and best of men is but an Aphorism.

There is one way of giving freshness and importance to the most common-place maxims—that of reflecting on them in direct reference to our own state and conduct, to our own past and future being.

S. T. Coleridge.

Mature and sedate wisdom has been fond of summing up the results of its experience in weighty sentences. Solomon did so: the wise men of India and Greece did so: Bacon did so: Goethe in his old age took delight in doing so . . . . They who can not weave an uniform web, may at least produce a piece of patchwork; which may be useful, and not without a charm of its own. The very sharpness and abruptness with which truths must be asserted, when they are to stand singly, is not ill-fitted to startle and rouse sluggish and drowsy minds.

Guesses at Truth.

A collection of good sentences resembles a string of pearls.

Chinese saying.

Nor do Apophthegms only serve for ornament and delight, but also for action and civil use: as being the edge-tools of speech, which cut and penetrate the knots of business and affairs.—Bacon.

How often one finds in life, that an idea, which one may have met in youth, made visible in words, but also veiled in them, and which in this shape has haunted one with a vague sense of something divine, but dim and inscrutable, becomes, at the call of conscience, or when real events and beings give it its fit body, the open aspect of a messenger from Heaven, and the familiar friend of all one's after days. Sterling.

Abstracts, abridgments, summaries, &c., have the same use with burning glasses, to collect the diffused rays of wit and learning in authors, and make them point with warmth and quickness upon the reader's imagination. Swift.

Harmony, the ultimate object of all things, should exist as in the universe, so in man also, who is a little world in himself.

It is to this end especially that education should be directed; which requires:

1. That youth should not hear of any thing which may awaken unchaste desires, until they are acquainted with the dignity and loftiness of human nature.

2. That youth should endeavor to attain a ripe development, by means of effort.

3. That parents are the proper educators; and that it is therefore the greatest injustice to separate parents and children.

4. That education should extend over the whole period of youth.

PYTHAGORAS.

Man becomes what he is, principally by education; which pertains to the whole of life.

Education must begin even before birth, with the parents themselves; must constitute a rule of action during the entire life, and in a certain sense must exist during the whole of it.

A good education consists in giving to the body and the soul all the perfection of which they are susceptible. PLATO.

Man becomes what he is, by nature, habit, instruction.

The last two, together, constitute education, and must always accompany each other; the former, however, preceding.

It can improve nature, but not completely change it.

The intellect is perfected, not by knowledge but by activity.

The arts and sciences are powers, but every power exists only for the sake of action; the end of philosophy is not knowledge, but the energy conversant about knowledge. ARISTOTLE.

The regimen that will insure
A healthful body and a vigorous mind,
A countenance serene, expanded chest,
Heroic stature and a temperate tongue.
—— So were trained the heroes, who imbued
The field of Marathon with hostile blood.
This discipline it was that braced their nerves,
And fitted them for conquest.

ARISTOPHANES. *The Clouds.*

There is no living being whose nature is so obstinate and cross-grained as that of man; who has a natural tendency towards what is forbidden and dangerous, and does not willingly allow himself to be influenced.

But these sinful natural tendencies can be improved by wise laws, by a mild and just administration of them, and by an education which unites firmness and love. SENECA.

Education awakes the innate power of the mind, and high cultivation confirms it. HORACE.

The specific signification of Education has often been defined by means of the distinction between *educere* and *educare*. But this is not a sufficient basis for a precise definition. E. M. Arndt, in his "*Fragments on Human Culture*,"* considers *educare* to signify the artistic process or art of education, and thinks that *educere* is more correctly translated by "to bring up," or "raise up;" τρέφειν. Schmidt in one place considers *educere* to be the business of the mother, because she brings forth the child.† In another place, he says it means "to bring out of the family, into a larger sphere of life—into the world;"‡ and in a third, that it means "to awaken, set in activity and develop the inner higher faculties."§ *Educare* is in the latter place taken to mean, on the contrary, "to bring the boy out of his animalized state of existence; to change the animal man into the spiritual."

Let us now consider whether German etymology may not furnish a more definite answer. *Ziehen*‖ means to remove any thing from one place to another, in such a way that the thing moved follows the power, and does it, also, in a steady manner, in contradistinction to throwing, striking, or carrying; and the thing moved is in a certain sense forced to go itself, even though it struggles not to do so. This radical word has gained a metaphorical meaning in the department discussed by this work, by its relation in meaning to the sense in which it is used to signify the gardener's production of flowers from a bulb. Thus *ziehen* describes the management of his assistants by a teacher; of his orchestra by a leader, (though the compound *heranziehen* is more precisely proper); and in these cases the meaning is still very nearly the same with that of the original word, for there is a drawing after himself by the leader, without however any reference to the means by which the influence is exerted. But when *ziehen* is used to denote the sort of training that is acquired by a wild young man who is sent to be a soldier, the most prominent idea is that of the means used; the strenuous discipline; and the design is not that he shall follow after his discipliner in any sense, but that by means of his receiving the action here denoted by *ziehen*, that is by means of the passivity into which the constraint of his discipline brings him, he shall learn a right passivity, which is the negation of his previous wrong activity; namely, by means of an obedience to persons, authorities, orders; which obedience is the negation of his own undisciplined self-will. *Aufziehen* has a definite pedagogical meaning. It is the continuation of that careful protection from dangers to life, which is given to young infants; and therefore the physical care of the child, up to the period when it can take care of itself; a duty which can after the death of the mother be performed, for instance, by a maid. Here

* "*Fragmente über Menschenbildung.*"

† "*Outline*," &c., p. 40. "The child is brought forth into the light of day; *educitur;* as the proverb says, *educit obstetrix, educat nutrix, instituit paedagogus, docet magister.*"

‡ Ib., p. 221. § Ib., p. 223.

‖ *Ziehen* corresponds very nearly to the Latin root word of "educate," viz., *duco*, to lead, draw, &c.

the animal side of the human being is most prominent; so that the word may be used even of a calf; and when applied to persons, is usually spoken of orphaned or neglected children, who early come into the charge of strangers; and whose education is considered chiefly from the point of view of a beneficent life-sustained love. *Erziehen*, (educate,) on the contrary, according to the signification of the prefix *er* in many words, denotes the action of *ziehen* perfected; carried out to its ultimate object; as including all sides of the subjects of its action; complete within its proper scope. *Erziehen* (to educate) is therefore *ziehen* (to draw forth), and *aufziehen* (to bring up) in their metaphorical sense, but with the additional definite shade of meaning, that its action is carried out to its completed purpose, and applies to all sides of the object to be acted on. But this does not however fully express the actual extent of the idea. The best and most condensed definition that we can give is—Education is that intentional and systematic course of operations by adult persons upon the young, which is designed to raise the latter to whatever degree of individual excellence they are capable of by nature; and in whose attainment that divine purpose will be accomplished, for which every individual man is destined by God for himself and for society; and for which society also is destined in like manner.

SCHMIDT'S "*Pädagogische Encyklopädie.*"

Education is assistance directed to the fullest development of all the faculties of the man, and to an attainment the nearest possible of the end of his existence instituted by God. Thus education introduces nothing foreign into man, whereas instruction is concerned in the appropriation of a foreign material, of human knowledge generally, not the germs of which, but the capacity to make his own, lies in man.

Encyklopädie der Pädagogik.

Education is the act [i. e. the continuous and entire treatment and conduct and exertion of influence] which places a child in the condition to fulfill as nearly as possible his destiny as a mortal and immortal being. It has for its aim the development of his faculties as a man, physical, intellectual, moral, social, and religious, in such proportion that through their harmonious action he will escape the punishments which await the bad, and become worthy of the rewards reserved for virtue.

THOMAS BRAUN. *Cours de Pédagogie.*

Maintaining the health of the body; training its powers; developing and sharpening the natural understanding; enlightening ideas relative to man and the world; instructing and elevating the imagination, the sense of the beautiful, the noble, the great, the affecting, the refined, the pleasing; harmony of the bodily desires, and subjection of them to the moral laws of the reason; moderation in the enjoyment of the good things of life, and equanimity in the want of them; reference of all earthly being and action to the other side of the grave.

THE AUTHOR OF *The Impulses of Reason.*

There is within every man a divine ideal, the type after which he was created, the germs of a perfect person, and it is the office of education to favor and direct these germs. KANT.

Man is the only creature that requires to be educated: one generation educates another. The young, however, ought to be educated not in accordance with the present standard of the human race, but with a view to a future and much meliorated condition of humanity. In short, the object of education ought to be, to develop in the individual all the perfection of which he is capable. KANT.

The art of education ought to aim at a standard of elevation superior to what may happen to be the spirit of the time—for the child is to be educated not for the present merely. J. P. RICHTER.

I use this term (education) as embracing every means which can be made to act upon the vegetative, affective, and intellectual constitution of man, for the purpose of improving this his threefold nature.

Being asked what I mean by human nature? I reply, that it is not body alone, nor mind alone, nor animal propensities, affections, or passions; nor moral feelings, nor intellect; neither is it organization in general, nor any system of the body, nor any particularity whatever; but human nature, in the proper sense of the words, comprehends all the observable phenomena of life, from the moment of conception to that of death, both in the healthy and diseased state; or in short, all the manifestations both of the body and mind.

G. SPURZHEIM. *View of Education.*

Education may, in a certain sense, be said to be threefold—the education of nature, of man, and of circumstances. The internal development of our faculties and organs is the education of nature: the use which we are taught to make of this development is the education of man: and the acquisitions of our own experience respecting the objects which operate upon us is the education of circumstances. ROUSSEAU.

Education proposes to confer on man the highest improvement of which his body, his mind, and his soul, are capable, with a view to secure his well being, to fit him for society, and to prepare him for a better world. Hence, general education is divided into three branches, physical, intellectual, and moral, the latter including religious training. The first aims at health, strength and beauty; the second at mental power and the acquisition of knowledge; and the third at piety, justice, goodness, and wisdom. C. MARCEL. *Language.*

I call that education which embraces the culture of the whole man, with all his faculties—subjecting his senses, his understanding, and his passions to reason, to conscience, and to the evangelical laws of the Christian revelation. DE FELLENBURG.

The first thing to be done in conducting the understanding is precisely the same as conducting the body, to give it regular and copious supplies of food, to prevent that atrophy and marasmus of mind, which comes on from giving it no new ideas. It is a mistake equally fatal to the memory, the imagination, the powers of reasoning, and to every faculty of the mind, to think too early that we can live upon our stock of understanding—that it is time to leave off business, and make use of the acquisitions we have already made, without troubling ourselves any further to add to them. It is no more possible for an idle man to keep together a certain stock of knowledge than it is possible to keep together a stock of ice exposed to the meridian sun. Every day destroys a fact, a relation, or an inference; and the only method of preserving the bulk and value of the pile is by constantly adding to it.

The fire of our minds must act and feed—upon the pure spirit of knowledge, or upon the foul dregs of polluting passions. Therefore, when I say, love knowledge with a great love, with a vehement love, with a love coeval with life, what do I say, but love innocence—love virtue—love purity of conduct—love that which will comfort you, adorn you, never quit you;—which will open to you the kingdom of thought, and all the boundless regions of conception, as an asylum against the cruelty, the injustice, and the pain that may be your lot in the outer world—that which will make your motives habitually great and honorable, and light up in an instant a thousand noble disdains at the very thought of meanness and of fraud. SIDNEY SMITH.

There have been many men of an excellent mind and of great virtue without learning, merely by their extraordinary nature approaching to divine; but yet, when to this extraordinary nature are added the advantages of regular discipline and education, then at last something remarkably eminent and singularly great, is usually produced. CICERO.

Education in that sense in which it deserves the grave consideration and the earnest efforts of the community—is something more than the mere ability to read, write, and cipher; and something more too than what is commonly meant by moral and intellectual culture. It is the fitting the individual man for fulfilling his destiny, of attaining to the end, accomplishing the purposes for which God hath made him. It divides itself into two branches: 1. That which answers the question, what is my destiny as an individual, and fits me for attaining it? and 2dly, that which answers the question, what is the destiny of society, and fits me to coöperate in its attainment? Individual education is general and special—education as a man, and education with reference to occupation or social position. BROWNSON.

At the first it is no great matter *how much* you learn, but *how well* you learn it. ERASMUS.

It [the understanding] grows like a tree under the unseen operations of time. HORACE.

The most essential objects of education are the two following—first, to cultivate all the various principles of our nature, both speculative and active, in such a manner as to bring them to the greatest perfection of which they are susceptible; and, secondly, by watching over the impressions and associations which the mind receives in early life, to secure it against the influence of prevailing errors, and, as far as possible, engage its prepossessions on the side of truth.

To watch over the associations which they form in infancy; to give them early habits of mental activity; to rouse their curiosity, and direct it to proper objects; to exercise their ingenuity and invention; to cultivate in their minds a turn for speculation, and, at the same time, preserve their attention alive to the objects around them; to awaken their sensibilities to the beauties of nature, and to inspire them with a relish for intellectual enjoyment—these form but a part of the business of education. DUGALD STEWART.

Education is that noble art which has the charge of training the ignorance and imbecility of infancy into all the virtue, and power, and wisdom of mature manhood—of forming, of a creature, the frailest and feeblest which heaven has made, the intelligent and fearless sovereign of the whole animated creation, the interpreter and adorer, and almost the representative of the Divinity. THOMAS BROWN.

Education is a process calculated to qualify man to think, feel, and act in a manner most productive of happiness. It possesses three essentials—first, by early exercise to improve the powers and faculties, bodily and mental; secondly, to impart a knowledge of the nature and purposes of these powers and faculties; and, thirdly, to convey as extensive a knowledge as possible of the nature of external beings and things, and the relation of these to the human constitution. J. SIMPSON.

The paramount end of liberal study is the development of the student's mind, and knowledge is principally useful as a means of determining the faculties to that exercise through which this development is accomplished. Self-activity is the indispensable condition of improvement; and education is only education—that is, accomplishes its purposes, only by affording objects and supplying incitements to this spontaneous exertion. Strictly speaking, every man must educate himself.

SIR WILLIAM HAMILTON. *Metaphysics.*

The great result of schooling is a mind with just vision to discern, with free force to do; the grand schoolmaster is Practice.

The first principle of human culture, the foundation-stone of all but false imaginary culture, is that men must before every other thing, be trained to do somewhat. Thus, and others only, the living Force of a new man can be awakened, enkindled, and purified into victorious clearness! THOMAS CARLYLE. *Essays.*

"A virtuous and noble education" is whatever tends to train up to a healthy and graceful activity our mental and bodily powers, our affections, manners, and habits. It is the business, of course, of all our lives, or, more properly, of the whole duration of our being. But since impressions made early are the deepest and most lasting, that is, above all, education which tends in childhood and youth to form a manly, upright, and generous character, and thus to lay the foundation for a course of liberal and virtuous self-culture.

ALONZO POTTER. *The School and Schoolmaster.*

Costly apparatus and splendid cabinets have no magical power to make scholars. As a man is, in all circumstances under God, the master of his own fortune, so is he the maker of his own mind. The Creator has so constituted the human intellect, that it can only grow by its own action; and it will certainly and necessarily grow. Every man must therefore educate himself. His books and his teachers are but his helps; the work is his. A man is not educated until he has the ability to summon, on an emergency, his mental powers in vigorous exercise to affect his proposed object. It is not the man who has seen the most, or read the most who can do this; such an one is in danger of being borne down, like a beast of burden, by an overloaded mass of other men's thoughts. Nor is it the man who can boast merely of native vigor and capacity. The greatest of all the warriors who went to the siege of Troy, had not the preëminence because nature had given him strength, and he carried the largest bow; but because self-discipline had taught him how to bend it.

DANIEL WEBSTER.

Education is development, not instruction merely—not knowledge, facts, rules—communicated by the teacher, but it is discipline, it is a waking up of the mind, a growth of the mind—growth by a healthy assimilation of wholesome aliment. It is an inspiring of the mind with a thirst for knowledge, growth, enlargement—and then a disciplining of its powers so far that it can go on to educate itself. It is the arousing of the child's mind to think, without thinking for it; it is the awakening of its powers to observe, to remember, to reflect, to combine. It is not a cultivation of the memory to the neglect of every thing else; but is a calling forth of all the faculties into harmonious action.

DAVID PAGE. *Theory and Practice.*

Oh, woe to those who trample on the mind,
That deathless thing! They know not what they do,
Nor what they deal with. Man, perchance, may bind
The flower his step hath bruised; or light anew
The torch he quenches; or to music wind
Again the lyre-string from his touch that flew;—
But for the soul, oh, tremble, and beware
To lay rude hands upon God's mysteries there!

Anonymous.

The true end of education, is to unfold and direct aright our whole nature. Its office is to call forth power of every kind—power of thought, affection, will, and outward action; power to observe, to reason, to judge, to contrive; power to adopt good ends firmly, and to pursue them efficiently; power to govern ourselves, and to influence others; power to gain and to spread happiness. Reading is but an instrument; education is to teach its best use. The intellect was created, not to receive passively a few words, dates, facts, but to be active for the acquisition of truth. Accordingly, education should labor to inspire a profound love of truth, and to teach the processes of investigation. A sound logic, by which we mean the science or art which instructs us in the laws of reasoning and evidence, in the true methods of inquiry, and in the sources of false judgments, is an essential part of a good education. And yet, how little is done to teach the right use of the intellect, in the common modes of training either rich or poor. As a general rule, the young are to be made, as far as possible, their own teachers—the discoverers of truth—the interpreters of nature—the framers of science. They are to be helped to help themselves. They should be taught to observe and study the world in which they live, to trace the connections of events, to rise from particular facts to general principles, and then to apply these in explaining new phenomena. Such is a rapid outline of the intellectual education, which, as far as possible, should be given to all human beings; and with this, moral education should go hand in hand. In proportion as the child gains knowledge, he should be taught how to use it well—how to turn it to the good of mankind. He should study the world as God's world, and as the sphere in which he is to form interesting connections with his fellow-creatures. A spirit of humanity should be breathed into him from all his studies. In teaching geography, the physical and moral condition, the wants, advantages, and striking peculiarities of different nations, and the relations of climate, seas, rivers, mountains, to their characters and pursuits, should be pointed out, so as to awaken an interest in man wherever he dwells. History should be constantly used to exercise the moral judgment of the young, to call forth sympathy with the fortunes of the human race, and to expose to indignation and abhorrence that selfish ambition, that passion for dominion, which has so long deluged the earth with blood and woe. And not only should the excitement of just moral feeling be proposed in every study, the science of morals should form an important part of every child's instruction. One branch of ethics should be particularly insisted on by the government. Every school, established by law, should be specially bound to teach the duties of the citizen to the state, to unfold the principles of free institutions, and to train the young to an enlightened patriotism.

W. E. Channing. *Christian Examiner, Nov.*, 1833.

The object of the science of education is to render the mind the fittest possible instrument for discovering, applying, or obeying the laws under which God has placed the universe. Wayland.

We regard education as the formation of the character, physical, intellectual, and moral; as the process by which our faculties are developed, cultivated, and directed, and by which we are prepared for our station and employment, for usefulness and happiness, for time and eternity. W. C. Woodbridge.

All intelligent thinkers upon the subject now utterly discard and repudiate the idea that reading and writing, with a knowledge of accounts, constitute education. The lowest claim which any intelligent man now prefers in its behalf is, that its domain extends over the threefold nature of man; over his body, training it by the systematic and intelligent observance of those benign laws which secure health, impart strength and prolong life; over his intellect, invigorating the mind, replenishing it with knowledge, and cultivating all these tastes, which are allied to virtue; and over his moral and religious susceptibilities also, dethroning selfishness, enthroning conscience, leading the affections outwardly in good-will towards man, and upward in gratitude, and reverence to God.

Far above and beyond all special qualifications for special pursuits, is the importance of forming to usefulness and honor the capacities which are common to all mankind. The endowments that belong to all, are of far greater consequences than the peculiarities of any. The practical farmer, the ingenious mechanic, the talented artist, the upright legislator or judge, the accomplished teacher, are only modifications or varieties of the original *man*. The man is the trunk; occupations and professions are only different qualities of the fruit it yields. The development of the common nature; the cultivation of the germs of intelligence, uprightness, benevolence, truth that belong to all; these are the principal, the aim, the end,—while special preparations for the field or the shop, for the forum or the desk, for the land or the sea, are but incidents.

The great necessities of a race like ours, in a world like ours, are: a Body, grown from its elemental beginning, in health; compacted with strength and vital with activity in every part; impassive to heat and cold, and victorious over the vicissitudes of seasons and zones; not crippled by disease nor stricken down by early death; not shrinking from bravest effort, but panting, like fleetest runner, less for the prize than for the joy of the race; and rejuvenant amid the frosts of age. A Mind, as strong for the immortal as is the body for the mortal life; alike enlightened by the wisdom and beaconed by the errors of the past; through intelligence of the laws of nature, guiding her elemental forces, as it directs the limbs of its own body through the nerves of motion, thus making alliance with the exhaustless forces of nature for its strength and clothing itself with her endless charms for its beauty, and, wherever it goes, carrying a sun in its hand with which to explore the realms of nature, and reveal her yet hidden truths. And then a Moral Nature, presiding like a divinity over the whole, banishing sorrow and pain, gathering in earthly joys and immortal hopes, and transfigured and rapt by the sovereign and sublime aspiration TO KNOW AND DO THE WILL OF GOD.

Horace Mann.

II. THE MILITARY ACADEMY AT WEST POINT.

I. ORIGIN AND HISTORY. PERIOD I.—1802–1812.

The influence of the United States Military Academy, upon education, as well as its wide reputation as a school of science, render an inquiry into its rise and progress, a subject both of interest and profit. Since it is mind, rather than any system of forms and studies, which gives power to such institutions, a mere statement of dates and facts is insufficient to give us a just view of its character. We must, if possible, trace the spirit of the men who guided, and the principles impressed upon it. To do this, we shall resort, not merely to the record of events, but to our memory of men and acts, with which we were for years familiar.

It was not to be expected, that schools of refined, scientific art should be founded by small colonies in the wilderness of the new world. When even their clergymen must resort to Europe for education, and their lawyers for license, it was in vain to expect their soldiers to be accomplished engineers. When the revolutionary war came on, this fact became a painful experience. No man felt it more than Washington. With a people, whose patriotism was unquenchable; with soldiers, who rivaled the warriors of Leonidas, he found the best and truest of men, with the smallest possible share of military science. He was obliged to depend on European engineers for a skill which his countrymen did not possess; while their European ideas, and artificial habits were displeasing to his American principles.* He felt military instruction to be a primary want in the country. Accordingly, he was the real founder of the Military Academy; that is, he put forth the *germinal idea.* What the plan of it was to be, and what shape it should ultimately take, he did not state, and probably had not thought of; for Washington in the office of president, seldom meddled with the details of public affairs. What he meant to obtain, however, he distinctly stated, in his message, dated December 3rd, 1793, in referring to measures of national defense, he says an inquiry may be made: "whether

* *Vide*, Washington Letters.

your own experience, in the several states has not detected some imperfection in the scheme; and whether a material feature in the improvement of it ought not to be to afford an opportunity for the *study of those branches of the military art which can scarcely ever be obtained by practice alone.*"

In his message of December 7th, 1796, he said: "Whatever, argument may be drawn from particular examples, superficially viewed, a thorough examination of the subject will evince that the art of war is at once comprehensive and complicated; that it demands much previous study, and that the profession of it in its most improved and perfect state, is always of great moment to the security of a nation. This, therefore, ought to be a serious care of every government; *and for this purpose an academy, where a regular course of instruction is given*, is an obvious expedient, which different nations have employed."*

The views, always entertained, and repeatedly expressed by General Washington, were adopted by Mr. Adams and Mr. McHenry, secretary of war, in his administration, made an elaborate report on this subject, which was transmitted to congress, on 10th of December, 1800. It is due to Mr. McHenry, to say that his ideas of what ought to be a course of military instruction, were far in advance of what were actually provided, till after the war of 1812—'15 proved his ideas to be correct. In 1794, prior to the last message of Washington, congress attempted to supply the want of a military academy, by attaching cadets to the corps of artillerists, and engineers. This corps consisted of four battalions, to each of which eight cadets were to be attached. This made the whole number of cadets thirty-two; and for this corps of artillerists, engineers and cadets, the secretary of war was directed to procure books, instruments and apparatus. The term *cadet* signifying in French, the youngest brother of a family, and in Spanish, a young volunteer officer, became naturally applied to young men, who were junior, volunteer officers. In England, the *cadet* of a family was a young son, who volunteered for the India service; and in the United States has been properly applied to the youth, who enter the military academy.

It seems from the message of Washington, in 1796, that the attempt at military instruction, was a failure. No place, no teachers, no studies, were appointed. It was on the 16th of March, 1802, in

* It is not meant to say that this subject was not mentioned before. It was by Col. Pickering, in 1783. But whoever reads the letters and memoirs of Washington, will see, that all the early ideas on the subject of military education and military science were derived from the experience of Washington.

the early administration of Mr. Jefferson, that congress established, by that name, the *Military Academy*. It was still made part of an army corps; the idea of making a separate institution for scientific studies not being yet matured. The artillerists and engineers were made two distinct corps, of which there were forty cadets of artillery and ten of engineers. The corps of engineers consisted of a major, two captains, four lieutenants, and ten cadets, making seventeen in all. *The corps constituted the military academy*, established at West Point, in the State of New York. So little idea was then entertained of the true objects and mode of scientific instruction, that the law required the cadet, as well as officer, to do duty in any part of the United States. In other words, the only idea of the military academy, at that time, was *a place appointed where the officers of engineers might give or receive instruction, when not on other duty.* The actual academy; such as it was, conformed to that idea. The major of engineers was the commander, or superintendent. The two captains were instructors, and the cadets were pupils. It was, as a school, an inchoate existence, without regular teachers, or limited studies, or proper discipline. Yet, even in this imperfect condition, it did, as we shall see, some service which ought to be gratefully remembered.

In the meanwhile, let us turn for a moment, to the *place* which is so memorable in the annals of this country, and is now so intimately associated with science. If Dr. Beattie is correct in saying that the character of the mind is much associated with natural scenery, no place in America could have been more wisely selected, as the site of a national institution. World renowned, as West Point justly is, there is that in its scenery and associations, more interesting to a poetic or a patriotic mind, than its famed Academy. Its green plain, hidden amidst its mountains; its craggy summits; its rocky barriers; its dark evergreens; its darker waters, flowing on forever; that beautiful view of town and country, seen through the frowning brows of Crow Nest and the Beacon; that quiet vale, where Washington oft bent his steps, were lonely little mounds, where the soldiers of the Revolution repose; these forts and ramparts now indistinctly seen, which once guarded these mountain passes; yon ledge of rocks, where Kosciusko once made his little garden; all these and other memorable things, call up whatever is sublime in nature, or noble in history. It is impossible to forget them. It is impossible for the dullest mind, not to have its sensibilities excited, or its character elevated by the contemplation of such sublime scenes, or such interesting events. When such a spot

becomes the place of our education, its memories become poetic; its associations mingle with the flow of life, and the structure of our minds.

To return. The law having authorized this ideal Academy, it was immediately instituted, by the appointment of officers. The Academy, it is seen, was on quite a small scale. In fact, so far as teaching was concerned, the Academy consisted of two captains of engineers and ten cadets. The two captains were William H. Barron and Jared Mansfield. Mr. Mansfield had been a teacher of mathematics, navigation, and the classics, first at New Haven, (Conn.,) and then at Philadelphia. He had written a volume of "Essays" on mathematics and physics, quite original, and distinguishing him at that time, as the first mathematician of his country. This was brought to the notice of Mr. Jefferson, who with no great love of military affairs, was a warm friend of science. When the act was passed authorizing the Military Academy, Mr. Jefferson wrote to Mr. Mansfield, that he would appoint him a captain of engineers, for the *very purpose of becoming a teacher at West Point.* Accordingly he was appointed, on May 3rd, 1802; Captain Barron had been appointed in April. Then, in May 1802, the actual Military Academy was constituted, Captains Barron and Mansfield being teachers of mathematics and philosophy, to some half dozen or more cadets and lieutenants. No professor of engineering or of any other department was appointed before 1812. In pursuing the course and growth of instruction at West Point, during this period of ten years, we can only refer to the services of the instructors and graduates. In fact, there were no graduates prior to 1815; but there were *appointments* made from the cadets of the Military Academy, after more or less study at West Point. To understand what was done, we must refer to the actions of teachers and cadets, rather than to history. Its teachers were few and its annals brief. Captain Mansfield, after a year's teaching at West Point, was in 1808, appointed by Mr. Jefferson, to a more responsible position. It was necessary to the correctness of our public surveys, that the meridian lines and the base lines (which are co-ordinates,) should be established with astronomical accuracy. For this purpose, Captain Mansfield was appointed surveyor general of the north-western territory; furnished with astronomical instruments, and taking his residence in Ohio, proceeded to establish and perfect that beautiful system of surveys, by which the north-western states are distinguished. Retaining his military bent, with a view to his original destination at West Point, he actually returned there in 1814, to

recommence, as we shall see hereafter, his career as an instructor in the national institution. Of Captain Barron, his co-teacher, we only know that he was relieved in February, 1807. At the same time, his successor, FERDINAND R. HASSLER, was appointed, and remained till he resigned in 1810. Mr. Hassler was, we believe, a Swiss by birth. He wrote a small treatise on mathematics, and had quite an extensive reputation, as a mathematician, but was said to be too analytical and refined in the character of his mind, for American practical habits. He was intended for the coast survey, and, we believe, actually commenced it.

In November, 1806, ALDEN PARTRIDGE, superintendent of engineers, was appointed *acting assistant* professor of mathematics, and retained that position till April, 1812.

The "Teacherships" of French and drawing were created, by the act of February, 1803, being a very important addition to the original scheme of the Academy. To the teachership of French, FRANCIS DE MASSON was appointed, March, 1804, and resigned in March, 1812. To the teachership of drawing, CHRISTIAN E. ZOELLER was appointed, September, 1808, and resigned in April, 1810. Mr. Masson was a Frenchman by birth; Mr. Zoeller, a Swiss. Mr. Masson was highly spoken of by Colonel Williams, a good judge of what constitutes a scholar. Mr. Zoeller was an amiable man, of no high attainments, whose instruction in drawing was wholly confined to the military part, fortifications and bridges.

From this brief history, it appears, that there were but six teachers at West Point, between 1802 and 1812. Of these, no more than four were ever present at one time, and that only between 1808 and 1810. The teachers present, each year, were as follows:

1802—1803, . . . Captain Barron, Mathematics.
Captain Mansfield, Philosophy.
1804—1806, . . . Captain Barron, "
Francis Masson, French.
1806—1807, . . . Captain Barron, Mathematics.
Francis Masson, French.
Alden Partridge, Mathematics.
1808—1810, . . . Ferdinand Hassler, "
Alden Partridge, "
Francis Masson, French.
Christian Zoeller, Drawing.
1810—1812, . . . Alden Partridge, Mathematics.
Francis Masson, French.

This glance at the actual teachers of West Point enables us to

see at a glance, what was done. No continuous study was pursued at all, except mathematics. For the eight years, between 1804 and 1812, French was taught by an able professor, Mr. Masson, and from 1808 to 1810, drawing. In 1812, this inchoate existence of the Academy was ended by the act of congress, reorganizing the institution, and placing it on a permanent and extensive foundation. The next period of five years, from 1812 to 1817, was the *forming* period of the Academy. In some respects, its elements were chaotic. In others, its *personnel* was inefficient and inharmonious. In others, again, its materials of instruction were inadequate. From this condition it finally emerged, and attained its present high character and usefulness. The history of this change is important, if not interesting to those who would understand what are the true foundations of a great school of education. In the meanwhile, let us return to what the CADETS of the Academy had done. If they were few, and with small means of instruction, they may nevertheless have shown that the Academy was not altogether fruitless. How many cadets were appointed between 1802 and 1812, we do not exactly know, but we have the number appointed *from the Academy.* The number of cadets promoted from the Academy during that period were for each year, thus:

In 1802, . . . 2.
In 1803, . . . 3.
In 1804, . . . 2.
In 1805, . . . 3.
In 1806, . . . 15.
In 1807, . . . 5.
In 1808, . . . 15.
In 1809, . . . 7.
In 1811, . . . 19.
In 1812, . . . 18.

This makes eighty-nine in ten years. Let us look at their career, as stated in the brief annals of the army; or, as they are retained in memory. Of this number, comprising ten cadets of more than half a century ago, this is the result:

Killed in battle, . . . 10.
Died in service, . . . 21.
In service, ... 7.
Resigned, ... 33.
Disbanded, ... 10.
Dropped, ... 3.
Dismissed, ... 4.
Declined, ... 1.

This is no bad roll. If we were to search our college rolls for those who had been really useful, those who died in battle, or served to the end, or entered other fields of usefulness, or now live in the performance of duty, we should find a less grateful exhibition than this. The number of those who had been "dropped," or "dismissed," for incompetence, or vice, would be far greater. Alas! if we could read the secret history of the college roll, how sad would be that account! We know, that in times past, many of the officers of the army were addicted to dissipation. Happily, we can say, many less now. But since we would estimate the value of the Military Academy, even in its most imperfect condition, let us see *who* some of these men were.

The first cadet appointed was General Joseph G. Swift,* who having risen to the rank of general of engineers and inspector of the Military Academy, resigned, became surveyor of the port of New York, and is now a venerable and respected citizen of Geneva. Of those who were killed in battle, *Eleazer D. Wood*, (whose monument stands at West Point,) was killed while loading a cannon, in the sortie from Fort Erie. Five others were killed on the Canada frontier, and four in battle with the Indians. Of those who died in service, *two* reached the rank of general, and *eight* that of field officers. Of those who are now in service, (7,) one is General Joseph G. Totten, chief of the corps of engineers, who served on the Canada frontier in the war of 1812, and at the siege of Vera Cruz. One is Col. Sylvanus Thayer, who served in the war of 1812—'15; who was superintendent of the Military Academy from 1817 to 1833, and to whom it is indebted for a large part of its usefulness. Of these gentlemen, we shall have more to say, when we refer to the forming period of the institution. Another is Colonel Rene De Russy, who was distinguished in the battle of Plattsburg, and became superintendent of the Academy on the retirement of Col. Thayer. Of those who resigned or were disbanded, many died young; one became a member of congress and politician; and another, Col. William McRee, was a remarkable man, distinguished for gallant conduct in the battle of Niagara and Fort Erie, a member of the board of engineers, and of cultivated mind; he resigned from the army and became surveyor general for Missouri and Arkansas, and finally died of cholera at St. Louis. Of the whole eighty-nine, who were commissioned prior to 1813, but twenty-one were alive in 1850, and several others have died since. The few

* The *first* diploma, which we suppose was a manuscript certificate, was the one given to the then Cadet Swift, and signed by Captains Barron, and Mansfield.

who now remain have seen more than half a century's service in useful employments. Perhaps it should be mentioned to the advantage of the Military Academy, as a school of physical education, that at the end of half a century, twenty of its pupils out of eighty-nine, should be yet alive. In twenty years of civil life, as appears from the United States census of 1830 and 1850, more than the same proportion of youth between ten and twenty years of age perished. The general strength and health of the pupils of West Point are beyond a doubt greater than that of the same number of young men brought up in the ordinary methods of education. This is not wholly due to physical exercises, but also to moral education, and to the care and comforts of their mode of life. Will any one deny that *discipline* is a part of moral education? Is not self-restraint, the regularity of habits, and the art of using the mind in intellectual pursuits, the most important elements of a moral education? It is to all these, and not merely the training and exercise of arms, that the eléves of the Academy owe so large a share of the health and strength of life.

In the period of its history which we have now examined, the Military Academy was really only in the germ of its existence. Like most other useful or remarkable enterprises, it was first thought of as a thing needed; then began without any clear idea of what it would become, and was then improved upon, till it grew to be of magnitude and importance.

PERIOD II.—1812—1825.

The Academy, in its germinal existence, whose history we have briefly traced, was obviously inadequate to supply the army and country with young men instructed in the art of war. Congress authorized the appointment of a large number of cadets. But the President did not act upon it, because there were neither professors, nor books, nor quarters, nor material at West Point for their training. In 1808, Mr. Jefferson recommended an enlargement of the Academy. In 1810, Mr. Madison did the same. In vain, however, were these recommendations, till the nation was roused from its indolent repose by the sudden shock of war. In 1811, the battle of Tippecanoe electrified the people. The war-whoop sounded on the north-western frontier, and the aggressive conduct of Great Britain became insufferable. War was an imperious necessity. Then it was that the use if not necessity of an institution for military training became obvious to all reflecting minds. In April, 1812, the act was passed which erected the frame-work of the pres-

ent Military Academy. As this legal outline has been little changed since, it is necessary that we should look to its provisions, for correct ideas of what the law intended, and what has been substantially carried out in its growth and development.

1st. It was provided, that the number of cadets might be increased to two hundred and fifty, and attached at the discretion of the President as students to the Military Academy at West Point, and be subject to the regulations thereof.

2d. That these cadets should be between the ages of fourteen and twenty-one, and previous to his appointment should be well versed in reading, writing, and arithmetic.

3d. That the Military Academy should consist of the Corps of Engineers, the Professors of Philosophy, of Mathematics, of Engineering, with their assistants, and the teachers of French and Drawing.

4th. That when any cadet shall receive a regular degree from the Academical Staff, he shall be considered a candidate for a commission in any corps for which he shall be deemed competent.

In addition to these provisions for education, money was appropriated for buildings and books, and for a band of music. The expenditure provided for was very small, compared with the need of the Academy; but it was enough for a beginning. It was far easier, as we shall see, to provide for all its material wants, than to bring it into that state of moral and intellectual discipline, which was essential to the attainment of great results. The institution, in its former period, was in an inchoate condition. A few young officers, raised up partly as teachers, and partly as pupils, without a course of studies, without regulations, and without discipline, could furnish no just ideas, from experience, of what a highly intellectual, well-ordered school of science should be; and accordingly the want of just ideas of education was precisely what first stood in the way of making West Point what it subsequently became.

For more than five years there was a wrestling between old and new ideas. There was a positive ignorance of what high education should be. In fact, the country had no models for it. Then there were old habits to overcome. Lastly, there was a willfulness on the part of some in authority, opposed as long as opposition was possible, to any new idea of things. For people are aware, in this day of change and novelty, how strongly the *vis inertiæ* of intellectual habits opposes intellectual improvement. This very *vis inertiæ*, at first, almost nullified the power of law itself to improve and enlarge the studies at West Point. How it acted we shall see. The first

difficulty at West Point was, (after preparing the accommodations and material) in complying with the spirit of the law, and placing the *academic instruction on the high ground really intended.* To understand this we must here advert to some provisions of the law which were either overlooked or neglected. First, the law expressly recognized an *Academic Staff*, who should confer *degrees.* Secondly, that the cadets of West Point should be *students*, subject to the *regulations of the Academy.* All this evidently meant that these two hundred and fifty young men should be placed, like students in college, under regular academic instruction, and that the professors and teachers should constitute an academic faculty, with power to regulate the education of the cadets, and confer degrees according to merit. Ultimately this was accomplished; but it took much effort on the part of the Professors to bring the military authorities into a just conception of this scheme. During the years 1812 and 1813, little was done except in commencing buildings, buying apparatus, appointing the cadets, and getting ready for the real business of the institution. Here we must record the first academic faculty organized at West Point. The professorship of Natural and Experimental Philosophy, which was higher in rank and emoluments than the others, was instituted expressly for Col. Jared Mansfield, who, having retained his commission in the corps of engineers, while he was surveyor-general in the north-western states, was now (October, 1812,) appointed to the same professorship which he held ten years before. Andrew Ellicott, who had been astronomer of the United States, and had a wide reputation for mathematical knowledge, was appointed professor of Mathematics, in September, 1813, at which time, also, Alden Partridge was appointed professor of Engineering. The teacher of drawing was Christian E. Zoeller, reappointed; and of French, Florimond De Masson. This was the first academic faculty. Subsequently, the principal professors were allowed assistants, and other teachers were at still later periods provided in the departments of Ethics, Tactics, Artillery, Chemistry, &c., as the institution was enlarged, and its wants were better known. The gentlemen above named were, however, the first professors and the first faculty. They had the real *labor* and responsibility of taking the initial steps, and to a large extent, of forming the Military Academy. At the very first step a difficulty occurred, which could not have been anticipated. Captain Alden Partridge, (who was professor of Engineering) was superintendent of West Point, from January, 1815, to November, 1816—nearly two years. He was a man of strong will; of in-

dependent and rather eccentric ideas, who quite naturally as a military man, long resident at the Point, wished to forget that the law required the education of the institution to be decided by an academic faculty, and governed by regulations. He chose rather to remember that it was a military post, governed by a military commandant, and sought to gratify his own ambition by grasping its sole direction. Professors Mansfield and Ellicott, who held no command in the army, took a different view of the subject. They justly thought, that the object of the institution was to give a thorough *scientific education*, especially adapted to the art of war; that this required discipline, and a course of studies systematic and complete; and that all this was evidently contemplated by the law, which said that the Academy should be governed by regulations, and hence an academic faculty. This difference of opinion was vital. It led to a controversy of two years, which belongs to the private rather than the public history of the Academy. Little of it was known to the public, and we are now concerned only in the issue. Had the views of Captain Partridge prevailed, the institution never could have become what it is.* Fortunately, the Professors had the law on their side, and also the good opinion of the administration, and eventually gave to the scientific college the cast and features which it now has. For three years, between 1814 and 1817, this internal controversy continued, gradually tending to give the Academy a systematic organization. General Joseph G. Swift, (head of the corps of engineers,) who was officially inspector of the Academy, took up his residence at West Point, in November, 1816, but remained only two months. While there, there could be no controversy, as to the government of the Academy, since the commander of engineers was legally its chief. After the removal of General Swift, Captain Partridge, as senior officer, again took command. It was determined, however, to remove him; and the Government most fortunately hit upon an officer, whose character, education, and accomplishments, most eminently fitted him for the post of governing, and disciplining the young men, who were in turn to become the *savans* as well as the ornaments of their country. This officer was Sylvanus Thayer, a native of Massachusetts, commissioner in 1808 from West Point to the engineer corps, and who had recently traveled in Europe, examining the military schools of France and Germany. The arrival of Colonel Thayer constitutes

* Captain Partridge, who was a useful and energetic man, had subsequently full opportunity of carrying out his popular views in the military schools of Norwich and Middletown, which he founded by his own efforts.

the most important epoch in the history of West Point. Why it is so will appear evident when we trace out the *scientific culture* of the Academy, and the discipline which it furnishes. Up to 1813, we have seen that the Military Academy was merely a small company of officers and cadets, who, being stationed at one post, were required while there to pursue certain mathematical and military studies. It had no one element of organization. From 1814 to 1817, professors Mansfield and Ellicott were struggling with no more than partial success, to give it organization and systematic instruction. But, in 1817, Colonel Thayer, who had seen in France what such institutions required, and whose enlightened mind realized the necessity of adopting better methods, at once coöperated with the Professors, in making a permanent and successful reform.

At this point we should notice the additions made to the academic staff, between 1816 and 1819, and the steps taken by the war department toward carrying out the views of the Professors, and Colonel Thayer. Claude Crozet was appointed professor of Engineering, in March, 1817; David B. Douglas was appointed assistant professor of Natural Philosophy, in January, 1815; Charles Davies was appointed assistant professor of Mathematics in December, 1816. Rev. Thomas Picton was appointed Chaplain, and professor of Ethics, in July, 1818. Thomas Gimbrede was appointed teacher of Drawing, in January, 1819. Major John Bliss, instructor of Tactics, in April, 1818; Lieut. George W. Gardiner, instructor of Artillery, in September, 1817. Claudius Berard succeeded Francis Masson, as teacher of French, in January, 1815; Joseph Du Commun was appointed second teacher of French, in March, 1818. Of the old professors, Captain Partridge and Francis Masson were gone; all the others remain. Thus, in 1817, when Colonel Thayer took charge of the Academy, the corps of teachers was composed of professors Mansfield, Ellicott, and Crozet; teachers Zoeller and Berard; and assistant professors Douglas and Davies, exclusive of the military teachers and of those appointed in 1818 and 1819. This was properly the Academic Staff, and Colonel Thayer was willing and pleased to have them take their proper part in organizing the institution, and raising it to that high standard of discipline and excellence to which it has since attained. In the meanwhile, the war department, under the enlightened administration of Mr. Crawford, had endeavored to supply some of the obvious defects of the Academy, by new regulations.

So far we have pursued the history of the Academy, as it progressed from a germinal idea to actual being and life. It is now

necessary to trace that system of *scientific culture* which is its essential element and peculiar character. In this the student of education may be more interested, and as we trace it still further, in its *fruits*, the education and services of more than two thousand young men, who have held the most important positions in all the departments of life, we shall be better able to pronounce a just judgment upon its merits and services.

Mr. Crawford, one of the most enlightened men who have appeared in public affairs, was, we believe, the first to understand and attempt to remedy the defects and irregularities which professors Mansfield and Ellicott had pointed out.* In March, 1816, "Rules and Regulations" were drawn up by Mr. Crawford. The main points in them were—

1. There shall be a Board of Visitors, to consist of five suitable gentlemen, who shall attend each annual examination.

2. There shall be a General Examination twice in each year; in July and December, and an annual vacation in July and August.

3. Cadets shall be admitted in September, and examined in spelling, reading, writing, and arithmetic.

4. A course of studies, embracing definitely all branches of science and instruction to be procured, and rules for classification shall be drawn up, and comprise a complete course of education at the institution.

According to the last regulation, a course of studies was drawn up by the Academic Faculty, and approved by Mr. Crawford, in July, 1816. This course comprised four years, and was substantially the same (although largely increased,) which has been pursued since.

The *first year* studies were English Grammar, French, Algebra, Geometry, and Logarithms.

The *second year* comprised French, Geometrical Construction, Application of Algebra, Mensuration, Plain and Spheric Trigonometry, the Conic Sections, and Drawing.

The *third year*, Natural and Experimental Philosophy, Astronomy, and Drawing.

The *fourth year*, Engineering, Geography, History, and Ethics.

In the first draft, Engineering was put in the third year; but since 1817, has been placed in the fourth. In a year or two afterwards was added the Calculus; and in a few years, Chemistry, Min-

* These defects and irregularities arose from not obeying the law, and not pursuing the ideas it pointed out. The great effort of Professors Mansfield and Ellicott, was to get the spirit of the law followed practically.

eralogy, and Natural Law. This course of studies is exclusive of the purely military part, which under the heads of Tactics, Practical Artillery and Gunnery, occupied several hours each day.

Thus, in July, 1816, the Academy had for the first time arrived at a course of studies, and a preparation for discipline. In the fall and winter of 1816, began an attempt to carry this course of studies into practical effect. We do not say there had been no studies and no attempt at classification before that, for there were, but that nothing had really been perfected in either, till after the "regulations" of 1816. If we could carry the reader back to the year 1815, and see the difficulties under which the professor of that day labored, the small material provided, and the undisciplined condition of the young men under their charge, we should give better views of the merits and services of its pioneer teachers. One or two reminiscences may possibly throw some light on the subject. Colonel Mansfield arrived at West Point in 1814, and immediately sought for his pupils. He was not like the professors of whom Gibbon speaks, remembering that he had a salary to receive, but forgetting he had duties to perform. On the contrary, he immediately asked for pupils to teach. What was he to teach? Philosophy and Astronomy. But these required prior training, and it was not till the winter of 1814–'15, that he could find any pupils. Then he found *five* young men who thought that they could go on in such studies. For want of any recitation rooms at the Point, he taught them in the parlor of his own house. As we shall refer specifically to the subject of text-books, we merely add, that the only work to be found at all suitable, was *Enfield's Philosophy*. There was no classification, and in a few months these five cadets were commissioned. They made the first class in Philosophy, taught at West Point.

Again, there are some who will recollect Professor Ellicott, sitting at his desk at the end of a long room, in the second story of what was called the Mess Hall, teaching Geometry or Algebra, looking and acting precisely like the old-fashioned schoolmaster, of whom it was written,

> "And still they gazed, and still the wonder grew,
> That one small head could carry all he knew."

The cadets were all "boys" to him, and his kind face was long remembered. In the other end of this room, or in the next, was seen his acting assistant, Stephen H. Long, then a young lieutenant of engineers; since distinguished as a traveler, an engineer, and a man of science. The text-book used was "Hutton's Mathematics," and

at that time the best to be had. Mr. Hutton had been a professor at Woolwich, England, and his treatises were plain, simple, easily understood, and therefore well adapted to beginners. It was, however, very deficient both in extent and analysis. It was a good text-book then, for there were no cadets trained to pursue deeper or more analytical works. With Hutton's Mathematics, Enfield's Philosophy, and plain right-lined drawing, and nothing which could be called engineering, did the cadets of the Academy get along, without roll, classification, or graduation, till the close of 1816.

In August, 1817, as we have said, Colonel Thayer became superintendent at West Point; and in the course of the next four or five years the Academy passed through the great changes which brought it from the inchoate to the crystallized state in which it now appears. The most important of these changes relate to scientific culture; and we shall best describe them by narrating the *actual work* the classes then pursued, and the change of text-books. The first step was taken, as we have seen, in March, 1816, by the regulations of Mr. Crawford, which required classification, a course of studies, and annual examinations. Some steps towards these were taken in 1816, but very imperfectly. In 1817 the system of classification was first systematically begun. Claude Crozet, a French officer under Napoleon, and a pupil of the Polytechnique School, was appointed professor of engineering, in March, 1817. The annual examination coming on in June, the course of studies in his department did not regularly commence till September, and the second or junior class* of 1817—'18 was the *first* class which commenced thoroughly the severe and complete course of studies at West Point. The *labors* of that class in the years 1818 and 1819 may have been equaled, but certainly have not been surpassed. It was not a brilliant class, but its labors were not the less on that account. It had not merely to pass over the plain turnpike road of science which is now made so easy to those who follow; but, like the pioneers of an army, had to cut down the obstructions, make their own bridges, and to no small extent, furnish their own munitions. Let us look into the class-room of 1817, as professor Crozet advances to instruct those

* The Class here spoken of graduated in 1819. Of its living members, are Henry Brewerton, late Superintendent at West Point; Edward D. Mansfield, Commissioner of Statistics for the State of Ohio; Justin Dimmick, late Commander of Fortress Monroe; Daniel Tyler, a distinguished Engineer and General in the Army of the Potomac; Wm. H. Swift, a distinguished Engineer, and President of the Illinois Canal Company; Joshua Baker, a Civil Engineer, Judge, and Planter, in Louisiana; and Major Turnbull, distinguished as a Topographical Engineer in the War with Mexico.

Among the dead was George H. Whistler, the most distinguished Civil Engineer our country has produced.

young men in studies, which were not only new to them, but entirely unheard of, and in which the language to which they were born and bred *furnished not a single text-book.* Professor Crozet was to teach engineering; but when he met the class, he found not one of them fit to learn engineering. These were branches of science, and its affiliations, essentially necessary to engineering, which they had never been taught. What was he to do? All he could do obviously was to supply these preliminary studies before he could commence in his own department. In other words, he must begin by becoming a teacher of mathematics, and drawing. The surprise of the French engineer instructed in the Polytechnique may well be imagined when he commenced giving his class certain problems and instructions, which not one of them could comprehend or perform. Among these preliminary studies was Descriptive Geometry, not an original and distinct science, but which by *projecting* geometrical figures and problems on co-ordinate planes, gave a more facile and practical mode of *representing* (as its name implies,) as well as solving many geometrical and practical problems. This, too, required an accurate knowledge of mathematical and perspective drawing, and its various minor but important arts. We doubt whether at that time more than a dozen or two professors of science in this country knew there was such a thing; *certainly* they never taught it, and equally certain, there was not a text-book in the English language. Perhaps this is not surprising, when we reflect, that this new application of geometry was scarcely thirty years old. Monge, a French savans, was, we believe, the author of this system, about the beginning of the French Revolution. Crozet meant to begin with Descriptive Geometry, but fortunately, the class was not in the last year of the course (in which engineering has recently been taught,) and could spare some time for mere mathematics. But, a new difficulty arose. There was no text-book in English, and none to be had just then in French. Geometry is not a thing to be taught orally. What is to be done? It was here at this precise time that Crozet, by aid of the carpenter and painter, introduced the *blackboard* and chalk. It is a very simple thing, and so is every thing which is useful; but we know of no mere adjunct of teaching, so useful as the blackboard. To professor Crozet, so far as we know, is due the introduction of this simple and useful machine. He found it, with many other things, far superior to the English methods in the Polytechnique of France.

We now see Crozet with his blackboard before him, chalk in hand, and animated, intellectual face, about to teach his class a new sci-

ence, without a text-book. Again he meets a new difficulty. He does not more than half understand the American language. This difficulty is only to be overcome by practice. With extreme difficulty he makes himself understood. With extreme difficulty his class comprehend that two planes at right-angles with one another are to be understood on the same surface of the blackboard on which are represented two different projections of the same object. But, at last it is done. The Professor labors with inexhaustible patience, and the pupils are pleased to receive into their minds entirely new ideas. The first problems are drawn and demonstrated on the blackboard, by the Professor; then drawn and demonstrated by the pupils, and then accurately copied into permanent drawings; and thus this class were taught in the most important and valuable method of imparting true knowledge, which has been given to mankind since the days of Socrates. Fortunately, professor Crozet had brought with him the complete drawings of the French Polytechnique, so that he was not, in this particular, obliged to depend upon himself. The path of his instruction soon became easier, and then this class completed their course in drawing, mathematics, and Engineering.

In the study of Natural Philosophy and Mechanics, the way was scarcely less difficult. We have already said, that Enfield's Philosophy was the first book on that subject. But this was not enough. Professor Mansfield looked around in vain for any suitable book on Mechanics. At last, *Gregory's Mechanics* was adopted. It was a book without any analysis, and probably written only for scientific men. Yet, it was the best to be had. For several years after, this work still remained the best book on Mechanics. Whether the class who first studied its mysterious pages acquired as clear and extensive ideas of the subject as those who have since passed over smoother roads, may be doubtful. It is certain they had more arduous labors. We have said there was *no* text-book on engineering, as a science. When the class which had commenced Descriptive Geometry, with professor Crozet, (then the second or the junior class,) had become the first class, they were instructed in engineering by drawings from oral teaching, on the blackboard. The various modes of laying out fortifications, of bridging, of defiling, of materials, ordnance, &c., were taught by professor Crozet. For several years no text-book in engineering was found. It was not till 1823 that a French treatise, entitled the Science of War and Fortication, was translated by Major O'Connor, and for several years used as a text-book. It will be seen that the class which, in 1817,

1818, and 1819, commenced the new culture and discipline of West Point, had an arduous and difficult task. It is, notwithstanding, quite probable, that this severe exercise of the mind, in making paths for itself, where there are no guide-posts on the way, no regal road, is a better discipline than that furnished by the more easy and systematic methods.

Perhaps no one step taken at West Point, has contributed so much to intellectual culture as the Merit-Roll. The effect at the Military Academy is totally different from what it would be at any civil institution. For there it determines *rank*, which is the great object of military men. Forty young men may be commissioned on the same day to the same grade, but through all their after life, even when they return to civil life, the distinctions of the merit-roll will follow them, and be counted for or against them. In the very first day of their commissioned service, the distinction is a practical one, for there are great and practical advantages in certain *arms* of the service over others. Thus the engineer officer, without any actual care of men, or responsibility for any movements, and almost always stationed at comfortable posts, has great advantages over other arms. The Artillery has advantages over the Infantry. Thus the cadet, commissioned from West Point, has determined for himself, by his position on the merit-roll, not only his rank in the army, but almost his position in human life. The merit-roll, as it now exists, graduated in all departments, and summed up at the close of the course, was not adopted at once, but was the work of several years.

In February, 1818, the superintendent of the Academy was directed by the Secretary at War to publish in the Army Register the "names of cadets who are distinguished for attainments, and meritorious conduct, not exceeding five in each class, specifying the studies in which they may excel."

We well recollect with what excitement and interest this communication was received by the cadets of that day, especially by those who thought themselves within the probabilities of that distinction. It unquestionably stimulated most of the young men to much greater exertions than they would otherwise have made. In a few months after, the merit-roll was fully established in the classes, and the rank of the graduating cadets determined by it.

There has been much discussion, and no small doubt, as to the real effects of emulation. There is undoubtedly a bad sense, and a bad effect attached to that term. But is that a necessary consequence of the merit-roll? Is not the merit-roll adopted, so far as it

can be ascertained, in all departments of human life? Who would risk himself with an ignorant engineer, if he can get a skilled one? Who would employ a poor clerk if he could get a good one? The objection made to emulation is that it excites wrong motives. However this may be, and however casuists may regard it, it is quite certain that the merit-roll is the strongest stimulant to intellectual exertion which can be presented to young men. Nor can we perceive, after much observation on its effect, that it has impaired the purely moral motives of action, or excited evil passions, to be remembered in after life. At West Point all the moral actions which are visible and tangible are brought within the scale of the merit-roll, and often the fate of a young man is determined far more by his standing in conduct, than in studies.

II. STUDY, DISCIPLINE, AND FRUITS.

Having thus sketched the historical progress of the Academy in the path of scientific culture, it remains for us to state what it *is;* what it has *done;* and what men have *conducted* it.

Without entering into minute details, we shall very briefly state the present methods of study and discipline. The leading studies in their order are Mathematics, Natural Philosophy, Mechanics, Astronomy, Engineering, Chemistry, French, Tactics, Artillery Practice, Mineralogy, Ethics, and History. This course is wholly scientific, the practical part being adapted strictly to military purposes. In the early period of the institution, some attempt was made to introduce the classics, but it was found impracticable, with the limited time allowed the cadets. Indeed, it may be doubted whether any institution can have more than one *tone.* All branches of human learning may be embraced in the proper schedule of university instruction; but has any university given equal attention to all branches of education? What are called colleges in our country, all aim at fitting young men for the civil professions—Law, Medicine, and Theology. They therefore make the classics the principal branch of study, and are right, since Law, Medicine, and Theology have their foundation deep laid in the classic ages. Literature also is a part of professional knowledge, necessary to adorn and illustrate the history and theory of professional science. Hence, in these lines of instruction specially have run the studies of the college, and from these is derived the *tone* of college education. The object of the Military Academy was totally different. It was not civil, but martial life, for which the young men were fitting. It was neither a metaphysical discussion, nor a hair-splitting argument

on the law, in which they were expected to excel. They were to learn the sterner arguments of the battle-field; to arrange squadrons for the hardy fight; to acquire that profound knowledge of the science and materials of nature, which should fit them for the complicated art of war; to defend and attack cities; to bridge rivers; to make roads; to provide armaments; to arrange munitions; to understand the topography of countries; and to foresee and provide all the resources necessary to national defense. This was the object of the Military Academy, and to that one end it was adapted. The method of education may be happily stated under the heads of Studies, Physical and Moral Discipline, and of Military Exercises.

1. The subjects and method of study we have already mentioned; Mathematical, Philosophical, Mechanical, Chemical, Military, and French, the military language. These being the chief topics of study, the students and the time were suitably divided into classes and hours. There are four classes, occupying four years, as usual in colleges. There are ten months of study, the intermission being in the hot months of July and August, when only military studies and exercises are pursued. The studies of a day are necessarily modified, by the introduction of military exercises which consume much time. The regular *study hours* (which include also the recitations,) are from 8 A. M. to 1 P. M., and from 2 P. M. to 4 P. M., making *seven hours* of study and recitations. Generally *four hours* more are consumed in military exercise and discipline, being the hours before breakfast, and after 4 P. M. Thus *eleven* hours are generally occupied either in study or exercises. The evening also after dark, is devoted to study in so far that with occasional exceptions, the cadets are required to be in the rooms. In this division of time we find a *continual alternation of study and exercise;* leaving the least possible time for idleness, or mere amusement. Indeed, the problem of education is to find the *maximum of development*, with the *minimum of idleness.* To this should be added, that the development should be co-relatively, intellectual, physical, and moral.* It is not merely ignorance, but *unequal* development, which is the great misfortune of mankind. How many great and glorious intellects have been lost, because there were no counter-balances to the

* We use the word *moral*, in preference to spiritual, because, in its comprehensive sense, including the latter; but by no means intimating, that in this Christian country, we should make any place of education a mere reproduction of Persian or Greek models. Our servile imitation of the Ancients, often makes us forget that we are neither Spartans nor Romans. The man who attempts at this day to revive the institutions of Pagan Greece, is as false to true Philosophy, as he is to true Christianity.

force which, inclined in only one direction, carried them off into a wilderness of fruitless objects!

In the course of studies pursued at West Point, the main feature is the *method* of study. We can give an idea of this in a few words. The very first thing done at West Point is to *recognize* the fact, that *intellects are unequal;* in other words, that of a given number of young men, commencing a severe and elaborate course of studies, there will be some who can not endure it, and can not get through; and others, who while they will come up to the requisites for graduation, can not equal a third class, who are capable and ambitious of receiving the highest style of education. This recognition is effected thus: a class enters the Academy, we will say *eighty* in number. This class enters on the 1st of September; and on the 1st of January there is a semi-annual examination. This four months of study by that class is regarded as a period of *probation*, which will furnish some test of the abilities of its several members. When the January examination is held, some are found deficient, and they are at once discarded. Then the remaining class are numbered, according to what is then their *apparent* merit, and they are divided into *sections* of from fifteen to twenty each; those highest on the roll being placed in the first section; those next in the second, &c. Usually there are four of these sections. The professor usually teaches the first section; his assistant the second, and so on. It is obviously a decided advantage to be in the first section, and there is usually a struggle to get there. But, a cadet may change his position in his class, at any time, by his own efforts. This he can only do, however, by more strenuous efforts. Then, if he be in the second section, he may at the end of the year be found to have a higher aggregate of good marks in study and conduct than some of those in the first section. In that case he will be transferred. Thus the ambition of the student has always placed before it the possibility of higher class rank, and if his talents and industry are capable of it, he will attain it.

The *method* of study at West Point, which in all institutions is the important point, is the *rigidly demonstrative*, in those studies which admit of it, and the *positively practical* in those which do not. The course of studies requires this, if the subjects of study are to be thoroughly understood. There is little of the purely metaphysical or transcendental known or pursued at West Point. No abstract speculations or merely theoretical inquiries occupy their minds. It is the actually knowing, and doing, in which they are engaged. As far as can be made practically useful, the *oral* method

is pursued. In mathematical and mechanical, engineering and tactical studies, this is largely the case. The blackboard, we have said, was first introduced into this country by Professor Crozet, at West Point. How largely this is used in all institutions of education now, our readers well know. It has proved one of the most efficient means of instruction at West Point. The student of the mathematical section, for example, begins with a text-book on Algebra, in his hand; but, it is on the blackboard where the workings of his mind are chiefly exhibited. He learns what he can from the book, but, on the blackboard the professor makes him trace out what he has done, not merely by telling what he knows, but what he don't know; detects his weak place, and forces his mind (so far as such force is possible,) to *think*, and think rightly on the subject before him. This *thinking*, we need not tell experienced teachers, is the great thing which education is to teach. If a student can not, or will not think studiously and industriously, he will not long remain at West Point. There is not, as in civil colleges, the great fallow field of poetry, history, and metaphysics, in which he may show his classical professor that he has acquired rich things, although ignorant of mathematics. It will not do to say that he has wandered with Greeks and Romans around the ruins of Troy, or by the waters of Babel. There is no such compensating principle in the system at West Point. The cadet must study what is set before him; must study it hard; must think upon it, and discipline his mind to systematic modes of thought.

2. This leads us to the Specific Discipline of the Academy. This is partially included in what we have already said. The intellectual discipline is mainly maintained by the method of study; but there is a grand and perfect system of discipline, which we may briefly describe. The term DISCIPLINE is derived from disciples, *discipulus*, and means originally *teaching* of knowledge; but this is not all, nor entirely its modern sense. Discipline is *training* in knowledge and virtue, in order and diligence, in good conduct, and good habits. To do this requires a control of the body as well as mind; of food and raiment; of time and exercise; as well as the imparting of facts and ideas. It was in the former sense rather than of the latter, that the word EDUCATION, (to lead forth,) was understood among the ancients, and so far as they went they were right. It was this *discipline* in virtue, temperance, courage, fortitude, and self-denial, which was taught in the days of Persian Cyrus, and Greek Leonidas. It was adopted among the early Christians; but, Cowper well said:—

"In colleges and halls in ancient days,
When learning, virtue, piety, and truth
Were precious, and inculcated with care,
There dwelt a sage called Discipline.
* * * * *
But Discipline, a faithful servant long,
Declin'd at length into the vale of years."

Nothing can be more certain than the decline of "discipline" in modern civil institutions. "Colleges and Halls" advertise a much enlarged course of studies; they call to their aid the most learned professors; and they proclaim "all the modern improvement," and yet it is quite certain, that a pupil can walk for years their learned halls, and at last receive the honors of graduation with a very small share of either learning, diligence, or virtue. Civil institutions may be most excellent for all, who either by early care or natural inclination are willing to use their opportunities for their intellectual or moral advancement. Nay, more, all open irregularities will be corrected, and all possible means afforded for spiritual improvement. But there are two things impossible to overcome—the popular and almost universal license allowed youth, (under the name of freedom) and the total want of any ultimate power to restrain it. These stand directly in the way of thorough discipline. At a Government Military Institution, this is directly reversed. The very first thing taught is *positive obedience.* The cadet can not be a week at West Point without knowing that he can not govern himself, but must be governed by others. If he is either not fit or not willing, the faculty meet the case in short and decisive language: "If you are either unable or unwilling to pursue the course of study and discipline, we direct you must instantly go. There are plenty more worthy to fill your place." There is, then, no alternative for the cadet but to go forward, and exert himself to the utmost, or not to go at all. There can be no loitering by the way, to slumber in idleness, or waste in dissipation, or pursue the pleasures of literature. There is no doubt that this stern and constant discipline is the great merit of West Point. It acts on the whole conduct and character. We have already said, that the class-standing determined by the merit-roll, determined their position relatively, and their rank in the army, and by consequence, great distinctions and differences in after life.

Let us see how this merit-roll is made up. The *first* thing done is to *mark* each cadet with a *figure* (having relation to an agreed scale of numbers,) for every act done or undone, in study, conduct,

drill, attention, &c. The *second* is to agree upon the *relative values* of each study, conduct, &c., in aggregating the whole positive or negative performance of a cadet, in his whole course at West Point. The summation of these for any one year gives his class-standing for that year, and the summation for the whole course gives his standing at the time of graduation, and his rank in the army.

Formerly, and we believe yet, the mode of marking and summing up for standing, was this. Each professor or teacher marked for one performance one of seven marks, from—3 to+3. This being purely artificial may be changed. But it is in this way the marking is made. Then in regard to *relative values* of study and conduct, the scale formerly was:—

Mathematics, ...	300.
Philosophy and Mechanics, . .	300.
Engineering and Military Science, . .	300.
Chemistry and Mineralogy, . .	200.
Moral and Political Philosophy, . .	200.
Conduct, ...	300.
Infantry Tactics, ...	150.
Artillery Practice, ...	150.
French, ...	100.
Drawing, ...	100.

To obtain 2,100, the aggregate, a cadet must never have failed in a recitation, or been absent from a military duty, derelict in the least particular. This most rarely if ever happens. Not to fall short more than 100, is evidence of very high standing.

It is evident, that under this system, emulation is highly excited, and, in fact, there must be a constant, unremitting effort to graduate at all. The general result is, that not more than one-half of all appointed are graduates. At the first semi-annual examination, many drop off; several more at the end of the first year, and more at the end of the second. Nearly all who survive the second year are graduated.

The only remaining point, peculiar to the system at West Point, is that of Military Exercises. As a Military Institution, this is a necessity, but it has also a great advantage as a means of Physical Education. This is a kind of education too much neglected, and for which civil colleges afford little opportunity, and no encouragement. The ordinary games, amusements, and walks in the field are relied upon to afford development to the body, and the natural tastes the only guide. So thought not Persian statesmen, Greek Philosopher, or Roman Senator. In contrast, a systematic

education of the body was a principle, and a practice, with all the civilized nations of antiquity. There was a constant attention to this in the training of youth; and the Olympian Games, the Gymnastic Exercises, and the Gladiatorial Shows, all had reference to this principle. If heathen nations could thus wisely attend to the healthy development of their bodies, can Christian people safely neglect it? There is no question that the Christian law of temperance, daily labor, good temper and amiable dispositions will do much to preserve health and strength. The health of the mind goes far to make the health of the body; but we must recollect that all students, properly so called—men who are set apart for the cultivation of learning and science—the *savans* of a country, are cut off at the very beginning, from that *daily labor* of the body, which in the dawn of human history was declared to be the necessity of man's existence. There is, therefore, a positive need of supplying by some system of salutary exercises, the place of that labor in which the farmer and mechanic are constantly exercised. What shall it be? Our common classical institutions have left this almost entirely to the student's own choice. Several hours of the day are left to the student to employ as he pleases. Does not experience prove, that he is quite as apt to employ this in novel reading, or playing cards, or visiting, or (in the case of an ambitious pupil,) in studying or reading the classics, as in any systematic method of exercise? Let the early dead of consumption, the victims of dissipation, and the unhappy subjects of chronic diseases, teach the living, that education consists not merely in spurring the mind on to intellectual feats, however admirable. The bird soars through the mid-heavens, but soars on the strength of his wings; and if he had the soul of Socrates, would still fall, when they are exhausted.

The military exercises, at West Point, accomplish some great results. They give an admirable exercise to the body, and they occupy time which might be wasted, and they compel the cadets to give up late night studies. Let us begin with the last. Nothing is more common among the ambitious students of colleges, than to sit up late at night. To burn the midnight oil, in order to accompany every thought in the realms of Plato, or fight with Hector on the plains of Troy, or pursue the phantom of metaphysics, or the genius of literature through the bright worlds of fiction, is the common boast of scholars. They have little thought, till too late, that life was shortened, and happiness impaired, by every hour taken from the natural period of rest. At West Point this evil is avoided, not so much by force of command, as by that of wise arrange-

ments. At the dawn of day, even in the shortest days, the shrill fife and rolling drum summon the cadet to his morning duties, and with the exception of the hours of meals, there is one incessant pressure upon him for bodily and intellectual labor, till ten at night. The results of this is, that when the hour of retirement comes, he must have more than human strength, who is not ready and willing to lie down and sleep. There are, of course, exceptions; but, at West Point, they are rare. The lights are put out at 10 o'clock, and the weary student is ready to retire. Thus, the system of discipline at the Military Academy at once strengthens the body, stimulates ambition, prevents idleness, and compels the mind to pursue the objects of reason, rather than the charms of imagination.

Having thus traced very briefly the history, studies, and discipline of West Point, it is only just to say something upon the fruits it has produced. These are divided naturally into two classes; the work of the *Professors*, and the performance of *Graduates*. The former is little noticed in the accounts of our colleges, except in the reputation of some distinguished men; but the latter, (the divines, lawyers, and statesmen who have graduated,) make the glory and the ornament of the triennial catalogue. Let us see if something has not been produced by West Point, which, in regard to the peculiar objects and teaching of the Academy, may bear a favorable comparison with the catalogue of any institution for the last half century. We do not mean in regard to the learned professions, for if West Point had excelled in these departments, it would have utterly failed in those for which it was made. But, we mean in the great field of science and of usefulness. First, let us look at some of the fruits produced by its professors, especially in the production of *text-books*. In the history of instruction at West Point, we have stated the total absence in the beginning, of text-books on some subjects, and the unfitness of those on others, even the common studies of Mathematics. The first text-book on Descriptive Geometry, published in America, and we believe, the English language, was prepared by Professor Crozet; but, as he then understood our language imperfectly, and had little taste for authorship, it was soon supplanted, by a complete treatise prepared by Professor Davies. On that subject, as on the subject of Engineering, there was no systematic treatise; and for a time, West Point got along by oral teaching, and such collateral aid as could be had. The utter deficiency of suitable books may be known by the fact, that the first really tolerable text-books on mathematics were translations of La Croix, Bourdon, Biot, &c., French authors. The French methods

of writing and teaching science are, on most topics, the best. Their style is clear and analytical. The English treatises are clumsy, being what is called in literature, elliptical, having vacancies in the reasoning, to be supplied by the student. The next great and permanent improvement in books, were the mathematical works of Professor DAVIES, a graduate of 1815, when the Academy was yet in a chrysalis state; he was several years a teacher before he conceived the idea of supplying a new series of mathematical text-books. His first plan was to adopt the best French works as a basis, and modify them, so as to be adapted to the American course of instruction. In this manner were prepared "Davies' Legendre," (Geometry,) and subsequently "Davies' Bourdon," (Algebra.) Other treatises were prepared on his own plan, and thus, for many years, Professor Davies pursued the quiet and laborious task (independent of other avocations,) of preparing an entire course of mathematical text-books. In time he modified these again, so as to fit them for the best colleges, and the higher schools. From the smallest mental arithmetic, to the profoundest treatise on the Calculus, he has produced clear and admirable text-books on every topic of mathematical studies. Many other good books have been prepared by professors in colleges, but there is no part of the United States in which some one of Davies' works is not taught in schools and colleges. Gradually, the civil institutions have been, in some degree, brought up to the standard of West Point, in mathematical studies.

In more recent years, Professor BARTLETT has published his treatise on Optics; Professor CHURCH, on the CALCULUS, and Professor MAHAN, on Field Fortification, and a treatise on Civil Engineering. Various other works on military subjects have been contributed to the stock of knowledge, by graduates of the Academy.*

Thus have the graduates of West Point, by disseminating in text-books, and teaching the higher knowledge, and better methods pursued there, in fact, and beyond dispute, *elevated the entire standard of education in this country.* Contrast, for example, the text-books of Day, Hutton, Enfield, Gregory, &c., which were the only ones to be had on mathematical science in 1818, with those now in use at West Point, New Haven, or Princeton. Contrast the methods of

* The authorship of West Point has been quite extensive; too much so to enumerate here. Among the works of its graduates, we may mention the "Political Manual," "American Education," and Statistical Reports by Edward D. Mansfield, the "Review of Edwards on the Will," by A. T. Bledsoe, and the Military Tactics of Generals McClellan, and Halleck. The Educational Works of Mr. Mansfield have been before the public for many years, and studied in all parts of the United States. In this class also may be mentioned the editorial labors of some twenty of the graduates, some of whom have had no small influence on public affairs.

study before the blackboard, the arts of drawing, the system of rigid demonstration, and of exact scales of merit were introduced, with those now in use in the higher schools of science, and we shall be satisfied that West Point has done a great and most useful work in elevating the standard of education. This is one fruit of its production, which has been altogether too lightly estimated. If it be of importance to increase the number of blades of grass, it is of much more importance to increase the number of minds fitted to enjoy the works of God, and use beneficially the gifts with which he has intrusted them.

A more obvious and commonly remarked fruit of West Point, is the *men*, laboring in their vocations which it has produced. It is impossible here, (though it would be a labor of love,) to note the individual examples of merit and usefulness, among those whom West Point has sent into the service of their country. We are here limited rather to a statement of general results. It may be done briefly; and since we have seen no Register later than 1850, we must deal in round numbers. These, however, will approximate the precise facts. They are there statistically:—

Whole number of Graduates, (about)	2,000.
Killed in battle,	80.
Died in service,	300.
In military service of the United States now,	800.
Have been in political service (ministers, governors,) mayors, and members of congress, and of legislature,	80.
Other civil and state offices,	100.
Lawyers,	110.
Clergymen, (including two bishops,)	16.
Physicians,	110.
President of colleges, professors and teachers,	100.
Authors, editors, and artists,	25.
Civil engineers, and officers of R. R. and canals,	180.
Merchants, financiers, farmers, and manufacturers,	140.
Officers of militia, and volunteers, (not of the army,)	110.

Numbers have resigned, and died young, not above enumerated, and numbers of these also have died in the civil service. We have made this classification to show how largely West Point has contributed to education, civil engineering, and the professions. These were not the direct objects of the Academy; but, when long years

of peace presented no duties but that of the garrison, and no glory to the profession of arms, it was natural and proper for active and ambitious young men to seek honor and usefulness in other pursuits. Nor did the government discourage this, for it foresaw what has happened, that these young men, so highly educated in science, would diffuse this knowledge throughout the country; elevate the standard of education, and be ready when their country needed their services. This has happened. A better knowledge of the exact sciences has been carried into the colleges; the railroads and canals have been built by engineers ready furnished by the government; and now when half a million of men have been suddenly called to war, they have been largely officered by the graduates of West Point. Here we may briefly allude to the most grave fact which has been urged against the Military Academy. The best officers of the rebel army were educated there. Why is this? Is there a want of sound morals? or, is loyalty no virtue there? Neither. A part, and *a part only** of the graduates born and grown up in the south, have gone with their friends, families, and connections, into the rebel service. This was on account of social ties, and had no more to do with West Point, than had other rebels from Harvard, or Yale, with those institutions. The noticeable fact is that they were educated at the government expense, and therefore under peculiar obligations to the country. But we find a parallel in the numerous officers of the state, as well as of the army and navy, who had been honored and rewarded at the public expense, but who thought it no shame to betray their country, and conspire against its life. We in vain attempt to account for such crimes, except upon the principle of common depravity, of which history has furnished similar examples in all ages of the world.

We have come to the end of the work we proposed. The rise, progress, and fruits of the Military Academy, we have briefly, and, we trust, justly delineated. Certainly, we have no end to serve, no prejudice to gratify. We knew the Academy in its early and immature period. We have seen it grow up to usefulness and honor. We see its graduates taking their places among those who have well served their country, and well deserved its laurels. In this we are *glad*. But our memory is filled with other images. We see West Point, in the now lengthening shadows of time. We seem to see those with whom we studied freshly present, as they

* We should not forget that a large number of West Point graduates from the south, (Maryland, Virginia, Carolina, and Tennessee,) have remained *loyal*, in spite of all the influences of social and political ties.

walk the green plain, or sit before the class, or strive to teach our dull and inattentive minds. They were men worth remembering, and when, in after times, we became their friends, rather than their pupils, still more pleasant memories gathered around them. We seem to see the venerable Ellicott, like Goldsmith's schoolmaster, alike full of learning, and of kindly humor; the placid and intellectual expression of Mansfield, whose abstracted looks seemed to be searching the higher philosophy; the courtly and dignified Thayer, whose graceful manners and attractive conversation can not be forgotten by any who knew him; and the amiable Courtnay, who though of later date, will long be remembered. He left the world in doubt, whether he was the better scholar or the better man.*

Of these, and of those like them, do we think, when we think of West Point. Nor of those alone; the place itself, where nature delights in the sublime and beautiful, rises before us. No imagination is necessary to clothe it with the hues of poetry; no books to recall the lost passages of history; no labored eulogy to bring up the memories of the dead. You can no more forget them, than you can the Pilgrims, when standing by the rock of Plymouth. Yon gray and moss-covered ruin was once the fortress of the Revolution. Yon scarcely perceptible pile of stones marks the spot where its soldiers were hutted in the winter. Yon slightly raised turf, beneath the dark shades of the cedar, was his grave, and soon, perhaps even now, that slight memorial will be gone forever. Yon little valley under the shadows of the mountain, recalls the illustrious name of Washington. Yon blue mountain-top tells of the beacon fires he lit. All around are memories; all around are sacred spots. If the Greek remembers Marathon; if the Jew lingers at Jerusalem, or the Christian pilgrim grows warm at Bethlehem, so should the American remember West Point; linger round the ruins of Fort Put, and gaze with delight on the blue summit of Beacon Hill.

* Mr. Courtnay was afterwards Professor of Philosophy and Mechanics in the University of Virginia. There he died, lamented by all who knew him.

REGULATIONS

RELATIVE TO

THE ADMISSION OF CADETS INTO THE MILITARY ACADEMY.

Applications for admission into the United States Military Academy at West Point, should be made by letter to the Secretary of War. By provision of law, each Congressional and Territorial district, and the District of Columbia, is entitled to have one cadet at the Military Academy, and no more. The district appointments are made on the nomination of the member of Congress representing the district at the date of the appointment. The law requires that the individual selected shall be an actual resident of the Congressional district of the State or Territory, or District of Columbia, from which the appointment purports to be made. Also, appointments "at large," not to exceed ten, are annually made. Application can be made, at any time, by the candidate himself, his parent, guardian, or any of his friends, and the name placed on the register. No preference will be given to applications on account of priority; nor will any application be entered in the register when the candidate is under or above the prescribed age; the *precise age* must be given; *no relaxation of the regulation in this respect will be made;* nor will any application be considered in cases where the age and other qualifications of the candidates are not stated. The fixed abode of the candidate, and *number* of the Congressional district which he considers his permanent residence, must be set forth in the application. The pay of a cadet is $30 per month, to commence from his admission into the Military Academy, and is considered ample, with proper economy, for his support.

The appointments will be made annually in the month of February or March, on the applications made within the preceding year. The claims of all the candidates on the register will be considered and acted upon. No certain information can be given as to the probable success of the candidate, before the arrival of the period for making the selections. Persons, therefore, making applications, must not expect to receive information on this point.

As a general rule, no person will be appointed who has had a brother educated at the institution.

QUALIFICATIONS.

Candidates must be over sixteen and under twenty-one years of age, at the time of entrance into the Military Academy; must be at least five feet in height, and free from any deformity, disease, or infirmity, which would render them unfit for the military service, and from any disorder of an infectious or immoral character. They must be able to read and write well, and perform with facility and accuracy the various operations of the four ground rules of arithmetic, of reduction, of simple and compound proportion, and of vulgar and decimal fractions.

It must be understood that a full compliance with the above conditions will be insisted on—that is to say—the candidate must write in a fair and legible hand, and without any material mistakes in spelling, such sentences as shall be dictated by the examiners; and he must answer promptly, and without errors,

all their questions in the above-mentioned rules of arithmetic: failing in any of these particulars, he will be rejected.

It must also be understood, that every candidate will, soon after his arrival at West Point, be subjected to a rigid examination by an experienced medical board; and should there be found to exist in him any of the following causes of disqualification, to such a degree as will immediately, or in all probability may at no very distant period, impair his efficiency, he will be rejected:

1. Feeble constitution and muscular tenuity; unsound health from whatever cause; indications of former disease; glandular swellings, or other symptoms of scrofula.

2. Chronic cutaneous affections, especially of the scalp, or any disorder of an infectious character.

3. Severe injuries of the bones of the head; convulsions.

4. Impaired vision from whatever cause; inflammatory affections of the eyelids; immobility or irregularity of the iris; fistula lachrymalis, &c., &c.

5. Deafness; copious discharge from the ears.

6. Loss of many teeth, or teeth generally unsound.

7. Impediment of speech.

8. Want of due capacity of the chest, and any other indication of a liat to a pulmonic disease.

9. Impaired or inadequate efficiency of one or both of the superior extr ties on account of fractures, especially of the clavicle, contraction of a joint, tenuation, deformity, &c., &c.

10. An unnatural excurvature or incurvature of the spine.

11. Hernia.

12. A varicose state of the veins, of the scrotum and spermatic cord, (when large,) sarcocele, hydrocele, hemorrhoids, fistulas.

13. Impaired or inadequate efficiency of one or both of the inferior extremities on account of varicose veins, fractures, malformation, (flat feet, &c.,) lameness, contraction, unequal length, bunions, over-lying or supernumerary toes, &c., &c.

14. Ulcers, or unsound cicatrices of ulcers likely to break out afresh.

III. ALDEN PARTRIDGE.

Alden Partridge, Captain in the United States Corps of Engineers, Professor and Superintendent of the Military Academy at West Point, and the Founder of a class of institutions in which the military element is recognized and provided for as an essential part of the training of the American citizen, was born at Norwich in Vermont, on the 12th of January, 1785. His father was a farmer, in independent circumstances, served in the war of the Revolution, and took part in the capture of Burgoyne and his army at Saratoga.

ıght up his son in the New England fashion, at such district
.s the times and the country afforded in the winter, and at
of work about the house and on the farm at other seasons,
was sixteen years of age, when, being of studious turn, and
reading, he was allowed to fit for college, and entered Dart-
in August, 1802. We have no knowledge of his studies in college, but it is presumed that his predilections were for the mathematics, and from the lateness with which he commenced his Latin and his subsequent declarations, his aversion was for the languages. Before completing his collegiate course he received the appointment of cadet* in the regiment of artillerists in the United States service, with orders to repair to West Point, and report himself to the commanding officer of the Military Academy at that place.

The Military Academy at the time Cadet Partridge arrived at West Point was very inadequately equipped with the men and material aids of instruction, although the two teachers appointed

* A *Cadet* in the military organization of the Army denoted a junior officer between the grade of lieutenant and sergeant, and was introduced from the French service. An Act of Congress, passed May 7th, 1794, provided for a Corps of Artillerists and Engineers, to consist of four battalions, to each of which eight *cadets* were to be attached, and authorized the Secretary of War to procure at the public expense the necessary books, instruments and apparatus for the use and benefit of said corps. In 1798, an additional regiment of Artillerists and Engineers was raised, increasing the number of Cadets to fifty-six. In 1798, the President was authorized to appoint four teachers of the Arts and Sciences necessary to Artillerists and Engineers. No appointment was made till 1801, and in 1802, the Military Academy was established at West Point, where the corps of Engineers was directed to repair with fifty Cadets, and the Senior Officer of the Corps was constituted Superintendent. Col. Williams was then Senior Officer of Engineers, and became, *ex-officio*, Superintendent, and continued such until 1812.

were abundantly capable in their respective departments. Jared Mansfield, especially, the teacher of natural philosophy, had won such reputation in mathematical studies that he received his commission as a captain of engineers from Mr. Jefferson for the very purpose of becoming a teacher at West Point, which he did by appointment in 1802, although in reality he did not perform his duties regularly, and then only for one year, having been, in 1808, appointed by President Jefferson to the responsible post of Surveyor-General of the North-western territory. Such instruction as was given was received by Cadet Partridge in 1806, and in July of that year, he was transferred to the Corps of Engineers, and in October, commissioned as first lieutenant. In November, 1806, he was appointed assistant professor of mathematics, Ferdinand R. Hassler, a little later, having been made Professor in place of Capt. Barron, retired. From Prof. Hassler, he received great help in his mathematical studies, as he afterwards repeatedly acknowledged. In 1808, Prof. Partridge was called to act in place of the Superintendent in the absence of Col. Williams, and continued to do so, with brief intervals, until January, 1815, when he was appointed to the office which he filled till March, 1816. In 1809, Mr. Hassler resigned the professorship of mathematics, and the instruction before given by him devolved on his assistant, Mr. Partridge. In 1810, he succeeded, after repeated applications to the Secretary of War, in obtaining two field pieces, for practical instruction of the Cadets as Artillerists.

In 1812, the Academy was re-organized, and was made to consist of the Corps of Engineers and the following Professors, in addition to the teachers of the French language and drawing, viz.: "one professor of natural and experimental philosophy; one professor of mathematics; and one professor of the art of engineering; each professor to have an assistant taken from the most prominent of the Officers or Cadets." The number of Cadets was increased to two hundred and fifty, and were directed to be arranged into companies of non-commissioned officers and privates, according to the directions of the commandant of Engineers, and be officered from that corps, "for the purposes of military instruction, in all the duties of a private, non-commissioned officer, and officer, and to be encamped at least three months of each year, and taught all the duties incident to a regular camp." The age of admission was fixed, the minimum at fourteen, and maximum at twenty-one, and preliminary knowledge to be well versed in reading, writing, and arithmetic. It was further provided that any Cadet who shall receive a regular degree from the Academical Staff, after going through all the classes,

shall be considered among the candidates for a commission in any corps, according to the duties he may be judged competent to perform. The sum of $25,000 was appropriated towards the buildings, library, implements, &c. On this broad basis the Academy was progressively enlarged to its present capabilities of usefulness.

Under the new arrangement of 1812, Mr. Partridge was appointed professor of mathematics, with the pay and emoluments of a major, which appointment was soon after, at the request of the Secretary of War, exchanged for that of professor of engineering, it being found more difficult to fill the latter post than the former. The duties of this professorship he continued to discharge from September 1, 1813, till December 31, 1816.

In 1808, Capt. Partridge was ordered by Col. Williams to take charge of the internal direction and control of the Military Academy as Superintendent, which duties he discharged until January 3, 1815, when, by regulations of that date, he was made the permanent Superintendent, which post he held till November 25th, 1816, and was finally relieved on the 13th of January, 1817.

By the regulation of January 3, 1815, the commandant of the Corps of Engineers was constituted *Inspector* of the Academy, and made responsible for instruction, and to report to the Department of War. Out of this appointment, and the instructions relating thereto, grew a difference of opinion, which resulted in the final withdrawal of Capt. Partridge from the institution, the resignation of his commission in the military service of the United States, and his subsequent devotion to the dissemination by lectures and personal efforts of the views which he had formed of the education required by the American citizen, and the establishment of institutions in which these views could be carried out.

After resigning his commission in the military service of the United States, Capt. Partridge was engaged, in the summer of 1818, as military instructor to a volunteer corps, and in giving a course of lectures on fortifications and other branches of military science to a class of officers and citizens in the city of New York. The views which he then presented on the best means of national defense were in advance of the "piping times of peace" in 1818, but have been since demanded to be eminently sound and practical by the terrible experience of 1861—1862.

His chief reliance for national defense was in the *military habits* of the great body of the American people—organized into suitable militia departments corresponding in the main to the limits of the several states, officered by men of the right capacity, scientific

education, and military training. The officers were required to assemble annually at stated periods, either in camps or rendezvous, at some central point in the department, to receive instruction from a few competent teachers of the military art. We give the plan in his own language as published at the time.

I. Let the United States be divided into military departments, say thirty in number; each of those departments to be wholly comprised within the same state, whenever this can be done.

II. To each of those departments let there be attached a military instructor, (under the authority of the United States,) who should receive the pay and emoluments of a colonel of infantry, and have the brevet-rank of a brigadier-general. These instructors to be gentlemen of established character and reputation, and who have received a regular scientific military education.

III. Let the officers of each brigade of militia in the United States be required to assemble annually at stated periods, either in camp or rendezvous, at some central point in the brigade, there to remain six days, for the purpose of military instruction. Let each instructor attend in succession at the several camps or places of rendezvous in his department, and devote himself assiduously to the instruction of the officers there assembled. One portion of the day might be devoted to practical drills, and field evolutions—also to the turning off, mounting, and relieving guards and sentinels, while the remainder could be most usefully employed in explaining and illustrating the principles of tactics generally, of artillery, of permanent and field fortification, the duties of troops in camp and in garrison, and such other branches as time and circumstances might permit, by means of familiar explanatory lectures.

IV. Let each officer receive from the government a reasonable allowance for his expenses while attending the instruction, and also while going to, and returning from, the camp or rendezvous.

Some of the principal advantages that would result from the adoption of the foregoing plan, I conceive would be as follows, viz.:—

1. The same system of tactics and discipline would pervade the whole mass of the militia—the instructors being imperatively required to adhere to one system. This would be a very important advantage.

2. By this means the country, in the course of a few years, would be furnished with a well organized military force, of at least one million of men, composed of the best materials in the world for soldiers; the whole of which, the officers having been regularly and correctly instructed, might be rendered, in the course of a few weeks, after being called into service, perfectly competent to the efficient discharge of all the duties of the field. This assertion is not founded upon conjecture. An experience of nearly fifteen years in military instruction, has convinced me, that any of our regiments of militia, in their present state of discipline, if brought into the field and placed under competent officers, could, by three weeks instruction, be prepared for discharging all the duties of regular troops. The instruction, then, in time of peace, of the officers, becomes an object of great importance;—that of the privates is of secondary consideration. There is no difficulty in making soldiers, when officers understand their duty, and are disposed to perform it.

It may perhaps be objected to the foregoing plan, that the time proposed for the officers to remain in camp or rendezvous, is too limited to admit of their deriving much advantage therefrom. In answer to this I will observe, that a due share of experience in this species of instruction, has fully convinced me, that they would acquire more correct military information in six days, under a competent and systematic instructor, than they usually acquire under the present system, during the whole period from eighteen to forty-five years of age; and that, after attending two or three similar courses, the great body of them would be perfectly competent to the correct, efficient, and useful discharge of all the duties of the field. From the best calculation I have been able to make,

I feel confident, that the whole necessary expense of carrying this plan into full and effective operation, would not exceed six hundred thousand dollars—it would probably fall short of that sum. Whether the expense, then, is to be considered as disproportionate to the object in view, and therefore to constitute a barrier to its accomplishment, must be decided by the sound discretion of the representatives of the people. It appears to me, however, to bear no greater ratio to it, than does a grain of sand to the globe we inhabit. The cultivation of military science must also be viewed as of the first importance in a system of military defense for our country. The plan already detailed, is calculated for the general dissemination of practical military information throughout the community, but is not adapted to the investigation of principles. This can only be done at seminaries, where it constitutes a branch of regular attention and study; and where theory and practice can, in due proportion, be combined. At those seminaries would be formed our military instructors, our engineers, and our generals; and from those, as from so many foci, would all the improvements in the military art be diffused throughout the country.

In the lectures delivered in 1818, Capt. Partridge, in view of the inevitable disintegration by frost and moisture, and the improvements in the science of attack, anticipated the insufficiency of permanent fortifications—of works of masonry, no matter how expensively or strongly constructed—to the defense of our principal harbors against the attacks of a foreign foe; his reliance was on the general diffusion of military science and training amongst the militia, on an efficient navy, and the following plan of marine defense.

I. At the most important and exposed points on our seaboard, let one or two principal works of the most permanent kind be erected: these works to be kept in perfect repair, to be plentifully supplied with all the munitions of war, and the guns and carriages well secured from the weather by means of pent houses.

II. In the vicinity of all the most exposed and vulnerable points on the seaboard, let spacious and permanent arsenals be constructed, in which, let there be deposited ample supplies of cannon, mortars, gun carriages, materials for platforms, and other munitions of war, where they would remain perfectly safe from the weather.

III. In case of war or threatened invasion, let temporary works, either of earth, or of wood, be constructed at all the most vulnerable points, which could be readily furnished with cannon, gun carriages, platforms, and all the necessary implements and munitions from the arsenals in their vicinity.

IV. As soon as peace is restored, these works should be dismantled, and all their apparatus returned to the arsenals from whence it was taken. In case of future emergencies, they could be restored, or others of the same descriptions constructed in their places, which could be supplied from the arsenals in the manner above stated. The efficacy in marine defense, of works of the above description, I presume will not be doubted by any scientific military man. Should any one, however, be disposed to doubt it, I would beg leave to refer him to the defense of Fort Moultrie, in the harbor of Charleston, South Carolina, when attacked by the British shipping, during the Revolutionary war, and also to the defense made by the small fort at Stonington, Connecticut, when attacked in a similar manner during the last war.

By adopting this system, I think the following advantages would result:—

1. A more secure defense would be obtained. By knowing the description of force we had to encounter, we should be enabled to construct our temporary works in a manner the best calculated to repel it; and as the gun carriages, platforms, and implements, when taken from the arsenals, would be sound and in perfect order, we might reasonably calculate these works would make a more

vigorous resistance than permanent ones, which, with their apparatus, are in a state of partial dilapidation and decay.

2. The system would be much less expensive than the one by permanent fortification. Those temporary works could ordinarily be constructed by the troops with very little, if any, additional expense; but in case of pressing emergency, the zeal and patriotism of the people might be relied upon with safety, to supply any amount of labor that might be necessary, as was the case at New York in 1814. As it is not proposed they should be retained as military stations in time of peace, the expense of keeping them in repair would be nothing.

In the early part of 1819, Capt. Partridge was engaged in the exploring survey of the North Eastern boundary, under the fifth article of the treaty of Ghent. While on this survey he determined from barometrical and thermometrical observations of the altitudes of the Highlands dividing the rivers which flow northerly into the St. Lawrence, from those which flow southerly into the Atlantic ocean; he also made a profile of the country between several points on the St. Lawrence, and corresponding position in the state of Maine.

In 1820, Capt. Partridge resigned his position in this survey, for the purpose of carrying into practical effect a plan of education, which had occupied much of his attention since 1810, and which in its main features was, doubtless, suggested by his experience at Hanover, and West Point, and was calculated to supply certain deficiencies which he and others had already noticed in our American colleges and higher seminaries of learning. His views both of the deficiencies and their remedies were set forth in a lecture delivered at this time, which was subsequently printed. After defining "education in its most perfect state to be the preparing a youth in the best possible manner for the correct discharge of the duties of any station in which he may be placed," in this lecture he proceeds to characterize the existing plan of instruction.

1. It is not sufficiently practical, nor properly adapted to the various duties an American citizen may be called upon to discharge. Those of our youth who are destined for a liberal education, as it is called, are usually put, at an early age, to the study of the Latin and Greek languages, combining therewith a very slight attention to their own language, the elements of arithmetic, &c.; and after having devoted several years in this way, they are prepared to become members of a college or university.

Here they spend four years for the purpose of acquiring a knowledge of the higher branches of learning; after which, they receive their diplomas, and are supposed to be prepared to enter on the duties of active life. But, I would ask, is this actually the case? Are they prepared in the best possible manner to discharge correctly the duties of any station in which fortune or inclination may place them? Have they been instructed in the science of government generally, and more especially in the principles of our excellent Constitution, and thereby prepared to sit in the legislative councils of the nation? Has their attention been sufficiently directed to those great and important branches of national industry and sources of national wealth—agriculture, commerce, and

manufactures? Have they been taught to examine the policy of other nations, and the effect of that policy on the prosperity of their own country? Are they prepared to discharge the duties of civil or military engineers, or to endure fatigue, or to become the defenders of their country's rights, and the avengers of her wrongs, either in the ranks or at the head of her armies? It appears to me not; and if not, then, agreeably to the standard established, their education is so far defective.

2. Another defect in the present system, is, the entire neglect, in all our principal seminaries, of physical education, or the due cultivation and improvement of the physical powers of the students.

The great importance and even absolute necessity of a regular and systematic course of exercise for the preservation of health, and confirming and rendering vigorous the constitution, I presume, must be evident to the most superficial observer. It is for want of this, that so many of our most promising youths lose their health by the time they are prepared to enter on the grand theatre of active and useful life, and either prematurely die, or linger out a comparatively useless and miserable existence. That the health of the closest applicant may be preserved, when he is subjected to a regular and systematic course of exercises, I know, from practical experience; and I have no hesitation in asserting, that in nine cases out of ten, it is just as easy for a youth, however hard he may study, to attain the age of manhood, with a firm and vigorous constitution, capable of enduring exposure, hunger and fatigue, as it is to grow up puny and debilitated, incapable of either bodily or mental exertion.

3. A third defect in our system is, the amount of idle time allowed the students; that portion of the day during which they are actually engaged in study and recitations, under the eye of their instructors, comprises but a small portion of the whole; during the remainder, those that are disposed to study, will improve at their rooms, while those who are not so disposed, will not only not improve, but will be very likely to engage in practices injurious to their constitutions and destructive to their morals. If this vacant time could be employed in duties and exercises, which, while they amuse and improve the mind, would at the same time invigorate the body and confirm the constitution, it would certainly be a great point gained. That this may be done, I shall attempt in the course of these observations, to show.

4. A fourth defect is, the allowing to students, especially to those of the wealthier class, too much money, thereby inducing habits of dissipation and extravagance, highly injurious to themselves, and also to the seminaries of which they are members. I have no hesitation in asserting, that far the greater portion of the irregularities and disorderly proceedings amongst the students of our seminaries, may be traced to this fatal cause. Collect together at any seminary, a large number of youths, of the ages they generally are at our institutions, furnish them with money, and allow them a portion of idle time, and it may be viewed as a miracle, if a large portion of them do not become corrupt in morals, and instead of going forth into the world to become ornaments in society, they rather are prepared to become nuisances to the same. There is in this respect, an immense responsibility resting on parents and guardians, as well as on all others having the care and instruction of youth, of which it appears to me they are not sufficiently aware.

When youths are sent to a seminary, it is presumed they are sent for the purpose of learning something that is useful, and not to acquire bad habits, or to spend money; they should consequently be furnished with every thing necessary for their comfort, convenience and improvement, but money should in no instance be put into their hands. So certainly as they have it, just so certainly will they spend it, and this will, in nine cases out of ten, be done in a manner seriously to injure them, without any corresponding advantage. It frequently draws them into vicious and dissolute company, and induces habits of immorality and vice, which ultimately prove their ruin. The over-weening indulgence of parents, has been the cause of the destruction of the morals and future usefulness of many a promising youth. They may eventually discover their error, but alas, it is often too late to correct it. Much better does that person discharge the duties of a real friend to the thoughtless, unwary youth, who withholds from him the means of indulging in dissipated and vicious courses.

5. A fifth defect is the requiring all the students to pursue the same course of studies.

All youth have not the same inclinations, nor the same capacities; one may possess a particular inclination and capacity for the study of the classics, but not for the mathematics and other branches of science; with another it may be the reverse. Now it will be in vain to attempt making a mathematician of the former, or a linguist of the latter. Consequently, all the time that is devoted in this manner, will be lost, or something worse than lost. Every youth, who has any capacity or inclination for the acquirement of knowledge, will have some favorite studies, in which he will be likely to excel. It is certainly then much better that he should be permitted to pursue those, than, that by being forced to attend to others for which he has an aversion, and in which he will never excel, or ever make common proficiency, he should finally acquire a dislike to all study. The celebrated Pascal, is a striking instance of the absurdity and folly of attempting to force a youth to attend to branches of study, for which he has an utter aversion, to the exclusion of those for which he may possess a particular attachment. Had the father of this eminent man persisted in his absurd and foolish course, France would never have seen him, what he subsequently became, one of her brightest ornaments.

6. A sixth defect is the prescribing the length of time for completing, as it is termed, a course of education. By these means, the good scholar is placed nearly on a level with the sluggard, for whatever may be his exertions, he can gain nothing in respect to time, and the latter has, in consequence of this, less stimulus for exertion. If any thing will induce the indolent student to exert himself, it is the desire to prevent others getting ahead of him. It would be much better to allow each one to progress as rapidly as possible, with a thorough understanding of the subject.

Having stated what appeared to him the most prominent defects in the academies and colleges as organized and conducted, he next proceeds to point out the remedies.

1. The organization and discipline should be strictly military.

Under a military system, subordination and discipline are much more easily preserved than under any other. Whenever a youth can be impressed with the true principles and feelings of a soldier, he becomes, as a matter of course, subordinate, honorable, and manly. He disdains subterfuge and prevarication, and all that low cunning, which is but too prevalent. He acts not the part of the assassin, but if he have an enemy, he meets him openly and fairly. Others may boast that they have broken the laws and regulations of the institution of which they are, or have been members, and have escaped detection and punishment, by mean prevarication and falsehood. Not so the real soldier. If he have broken orders and regulations, he will openly acknowledge his error, and reform; but will not boast of having been insubordinate. Those principles, if imbibed and fixed in early youth, will continue to influence his conduct and actions during life; he will be equally observant of the laws of his country, as of the academic regulations under which he has lived; and will become the more estimable citizen in consequence thereof. I shall not pretend, however, that all who wear a military garb, or live, for a time, even under a correct system of military discipline, will be influenced in their conduct by the principles above stated; but if they are not, it only proves that they have previously imbibed erroneous principles, which have become too firmly fixed to be eradicated; or that nature has not formed them with minds capable of soaring above what is low and groveling.

2. Military science and instruction should constitute a part of the course of education.

The constitution of the United States has invested the military defense of the country in the great body of the people. By the wise provisions of this instrument, and of the laws made in pursuance thereof, every American citizen, from eighteen to forty-five years of age, unless specially exempted by law, is liable

to be called upon for the discharge of military duty—he is emphatically a citizen soldier, and it appears to me perfectly proper that he should be equally prepared by education to discharge, correctly, his duties in either capacity. If we intend to avoid a standing army, (that bane of a republic, and engine of oppression in the hands of despots,) our militia must be patronized and improved, and military information must be disseminated amongst the great mass of the people; when deposited with them, it is in safe hands, and will never be exhibited in practice, except in opposition to the enemies of the country. I am well aware there are amongst us many worthy individuals, who deem the cultivation of military science a sort of heresy, flattering themselves, and endeavoring to induce others to believe, that the time has now arrived, or is very near, when wars are to cease, and universal harmony prevail amongst mankind. But, my fellow-citizens, be not deceived by the syren song of peace, peace, when, in reality, there is no peace, except in a due and constant preparation for war. If we turn our attention to Europe, what do we behold? A league of crowned despots, impiously called holy, wielding a tremendous military force of two millions of mercenaries! Ill-fated Naples, and more ill-fated Spain, have both felt the effects of *their peaceable* dispositions, and were it not for the wide-spreading Atlantic, which the God of nature in his infinite goodness has interposed between us, we also, ere this, should have had a like experience. The principles of liberty are equally obnoxious to them, whether found in Europe, Asia, Africa, or America. If rendering mankind ignorant of the art of war, (as a science,) would prevent wars, then would I unite most cordially with those, usually termed peace-men, for the purpose of destroying every vestige of it. But such, I am confident, would not be the result. Wars amongst nations do not arise because they understand how to conduct them skillfully and on scientific principles; but are induced by the evil propensities and dispositions of mankind. To prevent the effect, the cause must be removed. We may render nations ignorant of the use of the musket and bayonet; we may carry them back, as respects the art of war, to a state of barbarism, or even of savageism, and still wars will exist. So long as mankind possess the dispositions which they now possess, and which they ever have possessed, so long they will fight. To prevent wars, then, the disposition must be changed; no remedy short of this. will be effectual. In proportion as nations are rude and unskilled in the art of war, will their military code be barbarous and unrelenting, their battles sanguinary, and their whole system of warfare, destructive. War, therefore, in such a case, becomes a far greater evil, than it does under an improved and refined system, where battles are won more by skill than by hard fighting, and the laws of war are proportionally ameliorated. What rational man, what friend of mankind, would be willing to exchange the present humane and refined system of warfare, for that practiced by an Attila, a Jenghis Khan, a Tamerlane, or a Mahomet, when hundreds of thousands fell in a single engagement, and when conquest and extermination were synonymous terms. On the principles of humanity, then, it appears to me that, so long as wars do exist, the military art should be improved and refined as much as possible; for, in proportion as this is done, battles will be less sanguinary and destructive, the whole system more humane, and war itself a far less evil. But independent of any connection with the profession of arms, or of any of the foregoing considerations, I consider a scientific knowledge of the military art, as constituting a very important part of the education of every individual engaged in the pursuit of useful knowledge, and this for many reasons; viz.:—

First. It is of great use in the reading of history, both ancient and modern.

A large portion of history is made up of accounts of military operations, descriptions of battles, sieges, &c. How, I would ask, is the reader to understand this part, if he be ignorant of the organization of armies, of the various systems of military tactics, of the science of fortification, and of the attack and defense of fortified places, both in ancient and modern times? Without such knowledge it is evident he derives, comparatively but little information from a large portion of what he reads.

Second. It is of great importance in the writing of history. I presume it will not be denied, that in order to write well on any subject, it must be under-

stood. How, then, can the historian give a correct and intelligible account of a campaign, battle, or siege, who is not only unacquainted with the principles on which military operations are conducted, but is also ignorant of the technical language necessary for communicating his ideas intelligibly on the subject? This is the principal reason why, as it appears to me, the ancient historians were so much superior to the modern. Many of their best historical writers were military men. Some of them accomplished commanders. The account of military operations by such writers as Xenophon, Thucydides, Polybius and Cæsar, are perfectly clear and intelligible, whereas when attempted by the great body of modern historians, the most we can learn is, that a fortress was besieged and taken, or that a battle was fought and a victory won, but are left in entire ignorance of the principles on which the operations were conducted, or of the reasons why the results were as they were.

Third. It is essentially necessary for the legislator.

The military defense of our country is doubtless one of the most important trusts which is vested by the constitution in the general government, and it is a well known fact, that more money is drawn from the people and disbursed in the military, than in any other department of the government. Now as all must be done under the sanction of the law, I would beg leave to inquire, whether it be not of the greatest importance, that those who are to make such laws should be in every respect well prepared to legislate understandingly on the subject? That there has been, and still is, a want of information on this subject amongst the great body of the members of Congress, I think will be perfectly evident to any one who is competent, and will take the trouble to examine our military legislation since the conclusion of the Revolutionary war. I feel little hesitation in asserting, that from want of this information, more than from any other cause, as much money has been uselessly expended in our military department alone, as would cancel a large portion of the national debt.

Fourth. It is of great use to the traveler.

Suppose a young man, with the best edueation he can obtain at any of our colleges or universities, were to visit Europe, where the military constitutes the first class of the community, and where the fortifications constitute the most important appendages to nearly all the principal cities, how much does he observe, which he does not understand? If he attempt a description of the cities, he finds himself embarrassed for want of a knowledge of fortification. If he attempt an investigation of the principles and organization of their institutions, or of their governments, he finds the military so interwoven with them all, that they can not be thoroughly understood without it. In fine, he will return with far less information, than with the aid of a military education he might have derived. As it respects the military exercises, I would observe, that were they of no other use than in preserving the health of students, and confirming in them a good figure and manliness of deportment, I should consider these were ample reasons for introducing them into our seminaries generally; they are better calculated than any others for counteracting the natural habits of students, and can always be attended to, at such times as would otherwise be spent in idleness or useless amusements. Having expressed my views thus fully on this subject, I will next proceed to state more specifically the other branches which I would propose to introduce into a complete course of education: and—

1. The course of classical and scientific instruction should be as extensive and perfect as at our most approved institutions. The students should be earnestly enjoined and required to derive as much of useful information from the most approved authors, as their time and circumstances would permit.

2. A due portion of time should be devoted to practical geometrical and other scientific operations in the field. The pupils should frequently be taken on pedestrian excursions into the country, be habituated to endure fatigue, to climb mountains, and to determine their altitudes by means of the barometer as well as by trigonometry. Those excursions, while they would learn them to walk, (which I estimate an important part of education,) and render them vigorous and healthy, would also prepare them for becoming men of practical science generally, and would further confer on them a correct *coup d'œil* so essentially

necessary for military and civil engineers, for surveyors, for travelers, &c., and which can never be acquired otherwise than by practice.

3. Another portion of their time should be devoted to practical agricultural pursuits, gardening, &c.

In a country like ours, which is emphatically agricultural, I presume it will not be doubted, that a practical scientific knowledge of agriculture would constitute an important appendage to the education of every American citizen. Indeed the most certain mode of improving the agriculture of the country will be to make it a branch of elementary education. By these means, it will not only be improved, but also a knowledge of their improvements generally disseminated amongst the great mass of the people.

4. A further portion of time should be devoted to attending familiar explanatory lectures on the various branches of military science, on the principles and practice of agriculture, commerce and manufactures, on political economy, on the constitution of the United States, and those of the individual states, in which should be pointed out particularly the powers and duties of the general govern ment, and the existing relations between that and the state governments, on the science of government generally. In fine, on all those branches of knowledge which are necessary to enable them to discharge, in the best possible manner, the duties they owe to themselves, to their fellow men, and to their country.

5. To the institution should be attached a range of mechanics' shops, where those who possess an aptitude and inclination might occasionally employ a leisure hour in learning the use of tools and acquiring a knowledge of some useful mechanic art.

The division of time, each day, I would make as follows, viz.:—

Eight hours to be devoted to study and recitation; eight hours allowed for sleep. Three hours for the regular meals, and such other necessary personal duties as the student may require. Two hours for the military and other exercises, fencing, &c. The remaining three hours to be devoted, in due proportion, to practical agricultural and scientific pursuits and duties, and in attending lectures on the various subjects before mentioned.

Some of the most prominent advantages of the foregoing plan would, in my opinion, be the following; viz.:—

1. The student would, in the time usually devoted to the acquirement of elementary education, (say six years) acquire, at least, as much, and I think I may venture to say more, of book knowledge, than he would under the present system.

2. In addition to this, he would go into the world an accomplished soldier, a scientific and practical agriculturist, an expert mechanician, an intelligent merchant, a political economist, legislator and statesman. In fine, he could hardly be placed in any situation, the duties of which he would not be prepared to discharge with honor to himself and advantage to his fellow-citizens and his country.

3. In addition to the foregoing, he would grow up with habits of industry, economy and morality, and, what is of little less importance, a firm and vigorous constitution; with a head to conceive and an arm to execute—he would emphatically possess a sound mind in a sound body.

After much correspondence Capt. Partridge decided to carry out his principles of education in an institution organized on his own plan and conducted by himself, with such assistance as he could command, in his native village of Norwich, Vermont. Here he opened, on the 4th of September, 1820, the American Literary, Scientific and Military Academy, on which the pupils or their parents had their choice of studies, out of a course as extensive as that of any academy and college in New England combined—in which

military training formed a prominent feature, and the mathematics, especially as applied to surveying and engineering, received special attention. During the four years and half of its continuance in Norwich the Academy was attended by 480 pupils, representing twenty-one out of the twenty-four states, and of these, and especially of such as continued on an average two years at the institution, a large proportion became distinguished in military, public, and business life—as large it is believed as the records of any other institution for the same period of time can show. Its success demonstrated beyond cavil, that military exercises and duties are not inconsistent with ardent devotion, and the highest attainments in literary and scientific studies.

In 1824, the citizens of Middletown, Connecticut, made a liberal subscription to secure the location there, of a college about to be established in that State, under Episcopal auspices. Failing in that object, by the location of the institution at Hartford, where it now exists under the name of Trinity College, they invited Capt. Partridge to remove his Academy to their city, and offered to erect and place at his disposal suitable buildings for his accommodation. This invitation and offer were accepted, and on the 1st of April, 1825, he closed his institution at Norwich, and on the 1st of September following, opened his new course of instruction at Middletown, with an attendance of two hundred and ninety-seven pupils in the first year. During the three years—up to September 1828, the American Literary, Scientific, and Military Academy at Middletown remained under his superintendence, there were nearly twelve hundred pupils representing every State and Territory of the United States, the British Provinces, Mexico, several of the South American States, and the West Indies. This attendance shows conclusively, that the military and scientific element, together with an optional course of study, and a term of residence limited by the ability of the pupil to complete the course, met a want not provided for in existing colleges. Of those who completed the full course of study begun at Norwich, as large a proportion, as the corresponding graduates of any American college, attained a high degree of usefulness and eminence in widely diversified fields of labor. Among its graduates are to be found the founders or professors of several State Military Institutes, many officers of the highest rank in the military service of the United States, several eminent civil engineers, superintendents, of railroads, members of Congress, lawyers, and men of practical efficiency and success in every line of business.

One of the characteristic features of Captain Partridge's system

of instruction and discipline at Middletown, was the military marches and pedestrian excursions for scientific and recreating purposes conducted under his personal command, or in his company. Several of these excursions occupied three or four weeks, extending in one instance to Washington. The military marches amounted in the aggregate to over two thousand miles, and these and the various pedesterain excursions, included visits to nearly all points of military and historical interest in New England and New York. The immediate and controlling reasons which induced Capt. Partridge to leave Middletown, are not known to the writer of this memoir. He has however, understood it was owing partly to a desire for temporary relief from the cares and confinement of immediate superintendence, that he might start a similar institution in the neighborhood of New York, and partly from disgust at the refusal of the Legislature of Connecticut in 1828, to grant to the institution at Middletown, the usual privileges and powers of a college.

In 1833, 1834, 1837, and 1839, Capt. Partridge was elected representative from the town of Norwich, to the Legislature of Vermont, and in that capacity labored to give efficiency to the military system of the State. In 1834, he secured for certain petitioners a charter for the Norwich University, in which the Trustees are required "to provide for a constant course of instruction in military science and civil engineering," and are "prohibited from establishing any regulations of a sectarian character, either in religion or politics." Of this corporation, consisting of twenty-five trustees, Capt. Partridge was a member, and in organizing the institution in 1825, he was elected president of the Faculty. He continued to instruct in his own department of military science and engineering, and administered the affairs of the university till 1844, when owing to some difficulties arising out of the use of the building, arms, and accourtrements, which were his private property, he resigned.

In 1838, he was influential in calling together a convention of military officers and persons interested in giving greater efficiency to the organization of the militia of the several states, to meet for consultation. This convention met at Norwich on the 4th of July; and continued to meet annually for many years, to discuss plans for the organization and discipline of the militia, for the dissemination of a knowledge of military science, for the defense of the coast, &c. Many reports of this body were drawn up by him, and the proceedings were forwarded to, and printed by order of the Congress of the United States.

In 1839, on the request of many influential citizens, he visited

Portsmouth, Virginia, to establish a Military School, which he did, and which was soon after recognized by the Legislature of the State as the Virginia Literary, Scientific, and Military Institute, and aided by an appropriation out of the Literary Fund. This Institute, with an Institute of a similar character at Lexington, in the western part of the State, has been greatly instrumental in diffusing widely in Virginia a knowledge and taste for military affairs. The success of this institution, and the personal influence of many of his own scholars at Norwich and Middletown, led to the establishment of similar schools in other southern states.

In May, 1842, Capt. Partridge accepted the position of Camp Instructor for a large body of officers and men of the Pennsylvania volunteer militia in encampment at Reading, Berks County. Each evening he delivered a lecture to officers assembled in the General's marquee, and during the day exercised the troops in the manual of arms, and in company, regimental, and brigade movements in the field. On this, and many similar occasions, he demonstrated the correctness and practicability of his theory of national defense, so far as testing the qualifications of officers for command, and giving accuracy, rapidity, and steadiness of exercise and movements to troops, by assembling officers and men of the State Militia, once or twice in the year, in convenient numbers and places, under instructors properly qualified for the work. A few instructors, themselves trained in the best military institutions, and familiar with every improvement in military organization, equipment, and movement, and especially when clothed with the reputation of success in actual service, would soon bring the entire militia of the states into a uniform system, and give respectability and efficiency to this department of the public service. This result would be more speedily realized if a number of educational institutions similar to those which he had organized under many disadvantages and against many prejudices, could call out and cultivate military taste and accomplishments among a portion of the young men of each state.

In 1853, he opened at Brandywine Springs, near Wilmington, in the State of Delaware, another institution in which he fondly hoped his ideal of a National school of education would be realized—an institution in which physical training in connection with military exercises and movements, should accompany the acquisition of practical knowledge of the great principles of science that underlie all the arts of peace and war, and resorted to by students from every state of the American Union. His plan as developed in conversation with those directly interested, embraced his old ideas of scien-

tific, and literary studies with systematic pedestrian excursions,* and marches in vacations to the great objects of natural, economical, and historical interest in different parts of the country. In this latter particular, he unconsciously applied the suggestion of Milton in his letter to Samuel Hartlib, that "the students of his Academy should go out in companies with prudent and staid guides to all quarters of the land, learning and observing all places of strength, and all commodities (facilities) of building and of soil, for towns and tillage, harbors and ports of trade,—even sometimes taking sea as far as to our navy to learn there also, what they can in the practical knowledge of sailing and sea-fight." Arrangements were made for a class of ten or twelve of the most advanced and matured cadets to accompany him to Europe to study the strategy of the great battles of the world, and the armies, armories, and resources of the great nations of Europe—thus again realizing Milton's plan of gratifying "the desire of the more hopeful youth" "to see other countries at three or four and twenty years of age, not to learn principles, but to enlarge experience and make wise observation." But these hopes were darkened for a time by a great disaster, and soon extinguished in the sudden death of the great projector. In the autumn of 1853, the buildings at Brandywine Springs, were consumed by fire, and although arrangements were at once made to secure suitable accommodations at Bristol, Pennsylvania, and upwards of one hundred pupils enrolled their names to attend for a year at that place, still the great motive power of the enterprise was stricken down.

At the close of the year, 1853, Capt. Partridge returned to Norwich, where his family still resided, in apparently good health and the best spirits. A few days after he reached home, he was attacked by sharp and excruciating pains in his back, which were soon subdued by anodynes, but from the prostration and the cause, which proved on a post-mortem examination to be an aneurism near the base of the spine, and which had been exhausting his vitality for years—he never rallied, and on the 17th of January, 1854, he breathed his last—widely and deeply mourned by troops of friends, who loved and admired him as their teacher, or looked up to him as the best expounder of principles of military science and education, and of national defense.

* Captain Partridge attached much importance to pedestrian excursions in reference both to hygenic, and educational considerations. To these excursions he attributed his own robust health, and his familiar knowledge of all the details of American battles. In one year, (1830,) he made four excursions from Norwich, each occupying from four to six days—and from one hundred and fifty to four hundred miles—the last day's walk generally averaging over sixty miles. He had ascended and measured the altitude of all the highest mountain elevations in the Northern States.

Although living most of his life in the discharge of educational and public duties, under circumstances inconsistent with "a local habitation," he had strong domestic tastes and attachments, and was a genial companion in his own room and home. In 1837, he married Miss Swazey, the daughter of a merchant in Claremont, New Hampshire, and to this happy union were born two children. The oldest boy, George, was educated by the father on his own system, and had displayed vigorous health, and strong partialities and attainments in mathematical studies and their applications; but he survived his father only a few months—"long desolate months they were to the widow and children"—and the tenement of that bright intellect was laid by the side of that of his hardy and indefatigable father in the little village burying-ground. The other son Henry, as he grew up, showed a partiality for the profession of law, and was pursuing his studies in Warren, Penn., when the call of the President of the United States for volunteers, summoned him to the defense of the flag of the country. He enlisted for the war, and was promoted to a captaincy in a Pennsylvania regiment, which was attached to the army of the Potomac, whose varying fortunes he shared till, greatly weakened by exposure and disease, he was honorably discharged from the service. His superior officer in writing to his mother, says: "He is in every respect a model officer. How could he be otherwise? He has it all by right of inheritance, and I fully appreciate that you have made a very great contribution to the government and the country in sending him forth to fight the battles which have been forced upon us."

NOTE.

[We are disappointed in not being able to close this article with a sketch of the character of Captain Partridge by one who was his pupil, and enjoyed his fullest confidence, and holds in high esteem his educational and military views. We hope to introduce it, with the Portrait promised in the Contents of this, in a subsequent number of this volume.—*Editor "American Journal of Education."*]

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IV. AMERICAN LITERARY, SCIENTIFIC, AND MILITARY ACADEMY.

AT NORWICH, VERMONT.

THE AMERICAN LITERARY, SCIENTIFIC, AND MILITARY ACADEMY, at Norwich, Vermont, was opened on the 4th of September, 1820, by Capt. Alden Partridge, and continued under his personal superintendence and instruction, assisted by several professors, until April 1st, 1825, when it was discontinued at Norwich, and reopened at Middletown, Connecticut. The catalogue of the officers and cadets published August, 1821, contains a prospectus from which we make extracts to exhibit the aims of that school and of this particular class of institutions at that date.

TERMS OF ADMISSION.

The requisite qualifications for becoming members of the Institution are the following, viz: That the candidate be of good moral character, that he be able to read and spell correctly, to write a fair, legible hand, and work the ground rules of arithmetic.

COURSE OF INSTRUCTION.

Young gentlemen destined for a college education, can be prepared at this seminary for admission into any college or university in the country, either as freshmen, or one or two years in advance, and in the mean time will be enabled to acquire a good military and practical scientific education. Young gentlemen also, destined for the navy, can here be instructed in the scientific part of their profession, and at the same time, obtain a correct knowledge of fortification, and of military operations generally, on land, which it is believed they would find highly useful in future life. Parents and guardians who are desirous of placing their sons or wards at this seminary, are requested to state whether they wish them to go through with the full course of education; and if not, to specify, particularly, those branches to which they desire them to attend, and also to mention their ages.

The course of Latin, Greek, Hebrew, French, and English languages, Arithmetic, the construction and use of Logarithms, Algebra, Geometry, Plane and Spherical Trigonometry, Planometry, Stereometry, Mensuration of heights and distances by Trigonometry, and also Geometrically, practical Geometry generally, including particularly Surveying and Leveling, Conic Sections, the use of the Barometer, with its application to measuring the altitudes of mountains and other eminences, Mechanics, Hydrostatics, Hydraulics, the elements of Chemistry and Electricity, Optics, Astronomy, Navigation, Geography, including the use of Maps and the Globes; Composition, Logic, History, Ethics, the elements of Natural and Political Law, the Law of Nations, Military Law, the Constitution of the United States, and of the states severally, Metaphysics; Agriculture, Permanent and Field Fortification, Field Engineering generally, the construction of Marine Batteries, Artillery duty, the principles of Gunnery, a complete course of Military Tactics, the attack and defense of fortified places, Castrametation, ancient Fortification, the ancient modes of attacking and defending fortified places, the ancient Tactics, particularly those of the Greeks and Romans, with a description of the organization and discipline of the phalanx and legion; Book-Keeping, Music, Fencing, Military Drawing, Topography, Civil Engineering, including the construction of Roads, Canals, Locks, and Bridges; Architecture.

The Hebrew and French languages, Fencing and Music will not be considered as comprised in the regular course of education, and consequently those who attend to them will be charged separately.

MILITARY EXERCISE, AND DUTIES.

The students will be regularly and correctly instructed in the elementary school of the soldier, and also in those of the company and battalion; they will likewise be taught the regular formation of military parades, the turning off, mounting, and relieving guards and sentinels; the duties of officers of the guard, officers of the day, and adjutants; the making out correctly the different descriptions of military reports; in fine, all the duties incident to the field or garrison. The military exercises and duties will be so arranged as not to occupy any of the time that would otherwise be devoted to study; they will be attended to at those hours of the day which are generally passed by students in idleness, or devoted to useless amusements, for which they will be made a pleasing and healthful substitute. Practical scientific operations will be frequently attended to, which will conduce equally to health and improvement.

The students will be required to sleep on matrasses, or straw-beds; no feather-beds will be allowed in the establishment.

For the purpose of giving to the students a military appearance, when engaged on military duty, and also on a principle of economy, they are required to wear a uniform dress, a description of which is hereunto annexed. In prescribing a dress, it has been endeavored to combine as far as possible, cheapness and a neat military appearance, with such a form as, while it leaves the student the free and unrestrained use of his limbs, will at the same time encumber him the least possible. The discipline will be strict, but correct; and particular attention will be given to the full development and due cultivation of all those liberal, manly, noble and independent sentiments which ought to characterize every American, whether citizen or soldier. The strictest attention will be given to the health, manners and morals of the students. They will be continually under the personal inspection of the superintendent, who will bestow upon them all that care and attention which it is believed their parents, under similar circumstances, would bestow.

MILITARY LECTURES.

For the accommodation of gentlemen, (particularly of those holding commissions in the volunteer corps and militia,) who may not wish to go through with a regular course of military studies and instruction, and also for the purpose of diffusing military science more generally, Capt. Partridge will deliver annually at the before-mentioned seminary, three courses of public lectures; the first course to commence on the second Monday in May, the second course on the second Monday in July, and the third course on the first Monday in October, annually. These lectures will embrace the following branches of military science and instruction, viz.:—

1st. Permanent and field fortification, the construction of field works generally, and also of marine batteries.

2d. The attack and defense of fortified places.

3d. The use of artillery, with a general exposition of the principles of gunnery.

4th. Military Tactics.

5th. Garrison and field service of troops, embracing particularly their police and rules for turning off, mounting and relieving guards and sentinels, and also for guard duty, likewise castrametation.

6th. General rules for the attack and defense of a province or country embracing an exposition of the principles of base lines of operation.

7th. Rules for the inspection and review of troops.

8th. A summary of ancient fortification, and also of the ancient modes of attacking and defending fortified places.

9th. A summary of the ancient tactics, particularly those of the Greeks and Romans.

10th. A description of some of the most celebrated battles and sieges, both of ancient and modern times, for the purpose of practically illustrating the principles explained in the lectures. In order to render the lectures on fortification perfectly intelligible, plans will be prepared, on which the several parts of a work will be clearly and distinctly exhibited.

Particular attention will be given to a full explanation of all the technical terms used in fortification, as well as in the other departments of military science. A full course will comprise about twenty lectures; five to be delivered in each week until the course be finished. The terms for attending a course will be ten dollars. Gentlemen subscribing for two courses, will be allowed ever after to attend gratis. All those attending the lectures, will be entitled, during the time of such attendance, to practical military instruction, and also to the privilege of the reading-room, without any additional charge.

On the 1st of April, 1825, Capt. Partridge was induced by liberal overtures from citizens of Middletown, Conn., to leave his institution at Norwich, and remove to Middletown, Conn., and reopen it in that city. Before doing so he published a card in which he exhibits the progress and results of his labors at Norwich.

This seminary was opened at Norwich, in the state of Vermont, on the 4th of September, 1820, under my immediate direction and superintendence; and although the plan was new and untried, besides containing principles, which were by many considered discordant with each other, viz., the connecting of mental improvement with a regular course of bodily exercise, and the full development of the physical powers, the whole conducted under a military system of discipline; still its success has exceeded, rather than fallen short, of my most sanguine expectations.

The following extract from a recent report of the adjutant of the institution, compiled from the rolls and other authentic documents, will enable the public to form their conclusions, from facts on this subject.

1st. The total number of cadets who have joined the institution, since its organization, is 480.

2d. The numbers from the respective states, and other sections hereafter mentioned, are as follows, viz.:—

From Maine,	28	From South Carolina,	45
Massachusetts,	89	Kentucky,	2
New Hampshire,	57	Georgia,	7
Vermont,	115	Ohio,	1
Connecticut,	33	Louisiana,	4
Rhode Island,	10	Mississippi,	5
New York,	40	Missouri,	1
Pennsylvania,	15	Michigan,	2
New Jersey,	6	District of Columbia,	2
Delaware,	2	Lower Canada,	2
Maryland,	4	Havana, Island Cuba,	1
Virginia,	1	Island Scio, Greece,	1
North Carolina,	7		

3dly. Of the above number, twenty are commissioned and warrant officers of the U. S. Navy, viz., 4 lieutenants, 1 assistant-surgeon, and 15 midshipmen.

4thly. Out of the whole, 441 have been engaged in the study of the Mathematics, and out of this number 145 have completed a full course of "*Hutton's Mathematics.*" Of these, 80 have, in addition, attended to practical Mathematics, 56 have continued their course through the study of Philosophy, and others are now fast progressing in the accomplishment of those higher branches also.

5thly. The whole number who have studied the Greek and Latin languages, is about 150. Of these, 25 have advanced far towards completing a course, although none have gone entirely through. Of those not included in the last-mentioned number, many have fitted for college, or progressed still farther, and many are progressing. What is here considered a course, is the same which is laid down in the prospectus, which could be scarcely completed in the period since the establishment of the institution.

6thly. The number of those who have attended to the French language, is about 130. Twenty have become well acquainted with the language—30 are very well advanced, and many of the remainder have made respectable progress.

7thly. About ten or twelve of those who have been, or are now members of the institution, have devoted considerable time and instruction of the militia or volunteer corps, in this and various other sections of the country, and many of them are still engaged in that useful employment.

Of those who have been, or are now, engaged in the study of the Latin and Greek languages, I flatter myself there are several who would not suffer by a comparison with any of the same degree of advancement at our older and most approved seminaries; and as a school of practical science, I have little hesitation in asserting, that it is second to none in our country. In confirmation of this assertion, I would observe, that since the establishment of the seminary, my pupils, in addition to their usual exercises in practical geometry, and many operations of minor consequence, have executed, in a very handsome manner, a profile of the country, exhibiting the perpendicular altitudes of all the prominent points, above tide water, as determined by actual observation, from the summit of Manchester mountain, in the state of Vermont, to the summit of mount Washington, the highest elevation of the White Mountains, in the state of New Hampshire, a distance of 165 miles. They have also executed a similar profile from Norwich to Whitehall, in the state of New York, a distance of sixty-eight miles, and

have further executed a trigonometrical survey of the country around Norwich, for a distance in some directions, of about twenty miles. This survey was commenced, and has been prosecuted, in such a manner as to serve as a basis for any further operations that may be thought necessary. A handsome topographical plan of this survey is finished.

In the department of French, it is believed, the pupils have made as rapid progress as at any seminary in our country, and in Mineralogy, Botany, &c., although but recently commenced, there appears to be much zeal, and a corresponding improvement, amongst the classes which have attended, and those still attending, numbering about sixty.

Music and fencing have been attended by a large proportion of the members, and with a progress highly creditable to them.

The military exercises and duties are common to all the cadets, and it is believed very few have left the seminary, who were not competent to instruct from the elementary drill of the soldier, to embrace the school of the battalion, and who, in addition, did not possess a very competent knowledge of the principles of the grand tactics, of the elements of permanent and field fortification, of the principles of gunnery, &c. The beneficial effects of the regular system of exercise and active duty, to which my pupils are subject, upon their health, has been fully equal to my expectations. But one death has happened at the institution, since its commencement; and this was a youth who had just entered his name on the rolls, but was attacked by a prevailing epidemic, of which he died, before commencing his studies or regular duties. Several who joined the seminary feeble and debilitated, have in a short time been entirely restored to vigorous health. Indeed, such has been the result, I believe, without a single exception. That a youth may, by means of a regular system of exercise, preserve all his bodily activity and vigor, and at the same time apply himself most assiduously to study, I have never had any doubts; but if I had, the facts developed since the establishment of this seminary, would have dispelled them. Many of my pupils, and those the closest applicants to study, walk with facility forty miles per day. In the summer of 1823, several of them left Norwich at day-break in the morning, walked to the summit of Ascutney mountain, and returned to Norwich about 9 o'clock in the evening of the same day—the whole distance forty-six miles: which, considering the fatigue and difficulty of ascending and descending the mountain, (upwards of 3,000 feet high,) may reasonably be estimated as equivalent to sixty miles on the usual roads of the country. They continued their regular studies and other duties the following day. In September, 1823, a party of nearly thirty accompanied me on a pedestrian tour to the summit of Manchester mountain, in the state of Vermont, a large portion of whom traveled 150 miles in four days, and on the fourth day one of the party, a youth of sixteen years of age, walked by my side forty-five miles. On a recent excursion to the summit of the most elevated of the White Mountains, with a party of fifty of my pupils, a large portion of them, on the last day, walked forty-two miles. Belonging to this party, was a youth of but twelve years of age, who walked the whole distance, (160 miles,) carrying his knapsack, with clothes, &c., and returned in perfect health.

Since the latter part of June, 1821, the cadets, as a military corps, have executed, under my personal command, six military marches, amounting, in the aggregate, to 637 miles. Different detachments from the corps have also, within the same time, in addition to several of minor importance, performed, under my personal direction, four pedestrian excursions, for practical scientific purposes, amounting in the aggregate to 684 miles, and which, added to the former, gives $637 \times 684 = 1321$ miles. To this may be added an excursion to the White Mountains, whole distance 170 miles, by a party which I did not accompany, and which will make the total distance traveled in those marches and excursions, 1491 miles.

The foregoing facts are stated for the purpose of illustrating and confirming the correctness of the opinion I have so often advanced in my lectures on education, relative to the practicability, and even facility, of combining the full development and perfection of the physical powers of youth, with a due cultivation and improvement of the mental faculties. Whether a young man, who enters on the grand theater of active life, with a mind and body equally vigorous and improved, who, while he has a head to conceive, possesses also an arm to execute, will or will not possess advantages in the discharge of the various duties he may be called upon to perform, over one, who has grown to the age of manhood, puny and debilitated, destitute of physical energy, and incapable of bodily exertion, I shall leave to the sound discretion of the American people to decide.

As it respects the effect of the system on the morals of youth, I would observe, that I feel confident no one has left the institution worse than he joined it, and that I flatter myself, several have, in this respect, been improved. Next after the influence of religion, I consider habits of industry and economy as constitut-

ing the surest basis of morals amongst youth. To instill these into the minds of my pupils, ever has, and ever will be, a leading object; and I consequently shall imperatively require the strictest adherence to all the regulations bearing on those points, by all concerned. I would therefore beg leave to assure the parents, guardians, and relatives of my pupils, that the regulations prohibiting the cadets being furnished with money, otherwise than by the superintendent, or by his express permission, is to be taken in its literal meaning, (without exception,) and must be adhered to under all circumstances; and that any deviation from it will be followed by immediate dismission. I would much prefer that the great body of my pupils should enter young, and grow up under my system. The mind and body are then more susceptible of improvement, than at a more advanced period. Few, if any, vicious habits have then been formed, and the morals, under a strict and regular discipline, may easily be preserved. It is my fixed determination not, knowingly, to admit any young man of confirmed vicious or dissipated habits into the institution. I would accordingly recommend to parents and guardians not to send me any of this description; for if they should gain admission, and did not immediately reform, (which seldom occurs when the habits are confirmed,) it would only eventuate in their dismission, and consequent disgrace. It is much easier to prevent a youth from acquiring bad habits, than to correct them after they are acquired. If parents and guardians will send me their sons and wards free from habits of dissipation, immorality, and vice, I will guarantee, as far as human agency will authorize, that they shall be preserved free from such habits, while they remain under my care. Every requisite means will be used to correct the foibles and faults incidental to youth—to accomplish this object no pains will be spared. With their foibles I will bear as much as any person, but with their vices I will make no compromise. For the purpose of enabling me the more readily and the more certainly to accomplish this important object, I must request parents and guardians, if their sons or wards have foibles or faults, frankly to state them to me. On this subject there should be no reserve; as, with such information, I should know much better what course to pursue with them.

The favorable view taken of the aims, progress, and results of the scientific and military training provided by Capt. Partridge in his Academy at Norwich, was amply justified by the success of his pupils at Middletown, as practical men in various departments of business and public life.

On account of the condition on which he held a portion of his property at Norwich, Capt. Partridge was obliged to maintain there a literary institution, after his removal to Middletown. When he discontinued his labors at the latter place, and not succeeding in his plans for establishing a scientific and military school in the neighborhood of New York, he returned to Norwich, and in 1832, made preparation to reëstablish his Academy on its old basis, and with enlarged premises. With this view he erected the building known as the North Barracks, which were occupied for two years by Rev. Amasa Buck, for the purposes of a Methodist school, known as the Franklin Seminary.

NORWICH UNIVERSITY.

In the spring of 1834, a number of gentlemen associated to establish at Norwich, not an academic, but a collegiate institution, after Capt. Partridge's views, and in the autumn of that year, obtained from the Legislature of Vermont, a charter by which the petitioners were constituted a Board of Trustees of an institution by the name of the *Norwich University*. The charter further provides "that the said Board shall be required to furnish at said institution constantly a course of Military instruction, both theoretical and practical, and also in Civil Engineering, and the practical sciences generally; and the President of said institution, with the consent of the Trustees, *shall have power to give and confer all such diplomas, degrees, honors, or licenses, as are usually given or conferred in Colleges or Universities*, at their discretion; provided, however, that in so doing they shall have respect to the morals and merits of the candidate alone."

This act of incorporation named fourteen gentlemen, and provided for the election of eleven others, which twenty-five should constitute the Board of Trustees of Norwich University. The first meeting of the Trustees was held at Norwich, Vt., January, 1835. The vacancies in the Board were then filled, and the first members of the Faculty were elected, viz.:—ALDEN PARTRIDGE, "President and Professor of Moral and Intellectual Philosophy, History, Science of Government, Political Economy, and Military Science and Tactics;" TRUMAN B. RANSOM, Vice-President, and Professor of Natural and Experimental Philosophy, Mathematics, Theoretical and Practical, and Civil Engineering; M. NORAS, Professor of Ancient and Modern Languages; and FRANKLIN MARSH and I. M. HORR, assistants in the English Department. These gentlemen were authorized to form a course of study and laws for the government of the institution.

In May, 1835, the University was opened under the auspices and in the buildings owned by Capt. Partridge, with a full course of literary, scientific, and military studies. Among those enumerated in the first prospectus were Military Law, Military Drawing, Civil and Military Engineering. "Military Science being considered an important appendage to the education of every American youth is taught theoretically in all departments of the University. The military exercises are attended at those hours of the day which are generally passed by students in idleness or devoted to useless amusements, for which they will be made a pleasing and healthful substitute." "The discipline will be strict, but correct; in principle, military. It will be a great and leading object to instill into the minds of students liberality of sentiment and principles of honorable integrity and attachment to our republican institutions. Everything of a sectarian character in religion will be entirely excluded and all literary honors will be conferred in accordance with scholarship and moral worth alone."

At the close of the academic year, 1835–6, (August 18, 1836,) the first Annual Commencement took place, and the class of 1836 then graduated, consisted of one person, Alonzo Jackman, now Brigadier-General in Vermont, and Professor of Mathematics, Military Science, etc., at the University. Professor Ransom, entered the United States Navy about this time, and Mr. Jackman was appointed to fill the vacant Professorship. Soon after this, Rev. Zerah Colburn, succeeded Professor Noras. August 17, 1837, the second Annual Commencement was held, and Hon. George McDuffie, of South Carolina, delivered the address; the next year Robert Rantoul, Jr., of Massachusetts, was the orator; in 1839, John Wentworth, of Illinois, and Thomas H. Seymour, of Connecticut, were speakers; and in 1840, Benjamin F. Hallett, of Boston. The catalogues of each of these years show that the number of students, or cadets, averaged a little less than a hundred, and in all the catalogues, the regulations for the Police of the Cadets' Quarters were given in full. They provided for all the military duties of the students, for the wearing of uniform, etc., etc.

In July, 1840, the Corps of the University under the command of Captain Partridge, performed a military march across the State to Fort Ticonderoga. They were just a week on the excursion, and in that time, they marched nearly a hundred and fifty miles on foot, about twenty-five miles per day. Notwithstanding the excessive warmth of the day, and the exposure to the air of the night, with no other covering than the soldiers' blanket, the Cadets all returned in good health and spirits.

During the year 1843, several changes took place in the University. From

the time Mr. Ransom resigned the Vice-Presidency, until May, 1843, that office was filled by Hon. Aaron Loveland. Mr. Ransom returned at this time, and was again made Vice-President, and Professor of Civil and Military Engineering, etc. The buildings and land used up to this time, were the property of Capt. Partridge. During May, arrangements were made for the purchase of this property by the University, but some misunderstanding occurred before this was done, and in November, President Partridge resigned, and took from the armory all the arms and accoutrements, attempted to revive his old Academy in another part of the village, and finally, when the University could not purchase his property at his prices, obliged the students to remove from the buildings. On his resignation, Truman B. Ransom was chosen President, and for the two years the institution was carried on in other buildings in the town. The Legislature was applied to, and appropriated a hundred stand of arms, sets of accoutrements, etc., for the use of the students. At last an arrangement was made with Capt. Partridge, for the purchase of his property, and the University returned to its old quarters. The number of students was small during these difficulties, but the military department was always active, a good military education was given, and men were graduated who now hold responsible places in the military service of the United States among the Federal troops.

In May, 1847, President Ransom, then Major-General of the Vermont Militia, resigned his place at the University, accepted that of Colonel of the "New England regiment," ninth infantry, and went with that body to Mexico. September 13th of the same year, he was shot while gallantly leading the charge of his regiment upon the fortifications of Chapultepec. When Gen. Ransom left, Prof. James D. Butler was appointed President, *pro tem.*, and in January, 1848, Gen. Henry S. Wheaton, of Massachusetts, was elected President, and served as such till August, 1849; he was succeeded in September, 1850, by Rev. Edward Bourns, LL. D., who still (1863,) holds that office.

Soon after 1850, the opposition to anything of a military education became very strong, the number of Cadets at this institution diminished, and the tone of the prospectus changed to suit the public. "The discipline is military in principle and form. The Cadets are under military organization, they dress in uniform, are regularly drilled with arms. But they are not made lovers of war! They are not found to adopt the profession of arms more than others of the same age, however educated; oftentimes the harmless practice of handling arms at this age, is found to satisfy the craving for the use of them, and these young men settle down into the ranks of peace more easily and more contentedly than those that have had no such training. The drill is an agreeable exercise. The system of discipline is strict, though not oppressive, its sole object is to preserve order and promote study." "The object is not to make soldiers, but to strengthen the body." During these years (from 1850 to 1860,) the prospects of the University were not bright. It was at once engaged in lawsuits, and troubled with debt and opposition. In 1853, it was proposed to move the University to Montpelier, but the project was finally abandoned, the last of the old Academy property was bought, the buildings were repaired and the institution freed from debt. Previous to 1850, the finances were in a very confused state. When the charter was obtained, land to the value of fifteen hundred dollars was brought and decded to the University. The sale of this, and subscriptions from Trustees and citizens of Norwich, produced enough to purchase the North Barracks.

The money received of students for tuition was always, and is still, all used for paying the salaries of the instructors. The room-rents scarcely paid the rent and repairs of the South Barracks, and the University ran slightly into debt. The State, in 1853–4, gave the institution about thirteen hundred dollars of an unappropriated school fund, and enough more was raised by friends of the University to purchase the South Barracks, and pay off old debts, and put all the buildings in good repair. For several years it was obliged to struggle against a load of popular prejudice on account of its military feature, but since 1861, it has brushed up its uniform, and its Military Department no longer seeks to hide itself. No such semi-apologies for the military training of its students appear in its catalogues and prospectus for 1861 and 1862.

"The Norwich University differs from most colleges in two respects. These are its double system of study, consisting in an Academic and a Scientific course; and its department of Military Science. The Academic course comprises those studies usually pursued in other colleges; the Scientific embraces Mathematics, Natural Sciences, Belles-Lettres, Surveying, and Engineering. Four years are required to complete the former, and three, the latter course of study. Students are also allowed to take a partial course in either department. The students of all departments are regarded as equals.

"The feature, however, which more than any other distinguishes Norwich University from other Collegiate institutions. is the department of Military Science and Tactics.

"Agreeably to the provisions of its charter, the students are all under Military discipline—are called Cadets—dress in uniform, and are instructed in Infantry, Rifle, and Artillery Drill, Bayonet Exercise, Fortification, Reconnoissance, Castrametation, Guard and Out-Post duty, &c., &c. All the arms and equipments necessary for drills are furnished by the State of Vermont. * * *

"The military feature of this institution is one which should particularly commend it to the notice, and patronage of the public at this time. The want of men skilled in Military Science and Tactics, to take command of volunteer forces, and discipline them into effective soldiers, has been severely felt in organizing the present army of the United States. The reverses with which it has met are, without doubt, owing largely to this cause. To guard against this defect in the future, it is now generally felt that young men should be educated thoroughly in every department of Military Science. In times of peace this knowledge would not incapacitate men for nor interfere with any other business;—while in times of war, it would become invaluable to the country in training an army for efficient service."

The following persons constituted the Faculty in 1862. Rev. Edward Bourns, LL. D., President, and Professor of Moral Sciences, Ancient Languages, and Literature; Alonzo Jackman, A. M., Brigadier-General Vermont Volunteer Militia, Professor of Mathematics, Natural Philosophy, Military Science, and Tactics; Thomas R. Crosby, M. D., Professor of Anatomy, Physiology, and Natural History; Clinton S. Averill, A. M., Acting Professor of Natural Sciences; George Baillard, Professor of Modern Languages, and Linear and Architectural Drawing; Samuel W. Shattuck, B. S., Tutor in Mathematics and Military Tactics; Alonzo Jackman, A. M., Librarian.

V. MISS CAROLINE PLUMMER.

[Compiled from a "Memoir of the Plummer Family," by Hon. D. A. White.]

Miss Caroline Plummer, one of the largest benefactors of education, science, and christian morality, in the annals of female beneficence, was born in Salem, Mass., on the 13th of January, 1780. Her father, Dr. Joshua Plummer, was a native of Gloucester, who, after graduating at Harvard College in 1773, studied and practiced medicine there until 1785, and at Salem until his early death in 1791, at the age of thirty-five. Her mother, Olive Lyman, was the daughter of Rev. Isaac Lyman of York, and aunt of Theodore Lyman, the liberal benefactor of the State Reform School at Westboro, Mass. Left, by the death of her husband, with a family of seven children dependent on her care, Mrs. Plummer by her own energy, with the faithful and affectionate co-operation of the older boys as they grew able to assist her, managed by continuing for a time the apothecary shop of her husband, and by taking in a few boarders, to give them all a good education, and fit them to adorn the highest walks of social life. Her home was the loved resort of her children, and made charming by an unobtrusive exhibition of genuine domestic and social virtues, and a richly cultivated understanding. Her daughter Caroline was eminently distinguished by intellectual gifts and graces, and her power of conversation. Judge White, who made the acquaintance of Miss Plummer in 1803, remarks that her social distinction was the natural result of her fine endowments and the social influences under which she had lived and been educated. Her education, taking the word in its broadest sense, though simple, was of a high order. Her only school teachers were Mrs. and Miss Higginson, who were among the best and most truly refined women of that day in New England. Of a similar character were her associates at her mother's table and fireside, and in the various families where she was a privileged visitor and inmate. When with her grandparents at York, she must have had substantial literary instruction and been under influences conducive to the high moral principles for which she was ever remarkable. In her character and attainments she strikingly resembled her grandmother Lyman, who was educated

by one of the ablest divines of the country, and who added to a gentle dignity and winning sweetness of character, the attractions of a highly cultivated mind. She had cultivated the same familiarity with the British poets, extended to an intimate acquaintance with English literature generally. In Salem her friends and companions were of the choicest character. From infancy to maturity, indeed, she appeared to have known no other. Dr. and Mrs. Bowditch, whose house and whose hearts were always open to receive her, were her sincere and steadfast friends. With them she was most intimately confidential. Dr. Bowditch was at all times her wise counselor as well as dear friend, and his influence was as valuable to her as it was great. No one better understood her whole character, or held it in higher esteem. In the last interview I ever had with Dr. B.—a few days before his death,—he spoke with much feeling of several of his Salem friends, and in relation to Miss Plummer I well remember the emphatic manner in which he said,—"On every point of integrity and honor Caroline Plummer is as true as the needle to the pole."

Miss Plummer was nowhere happier than in Salem, and the period to which we have referred, about 1804, was perhaps the happiest of her life. With no anxious cares for her brothers—whose prospects were flattering—and surrounded by admiring friends, whom she loved, she could freely enjoy the richest pleasures of social life. The society of Salem at that time was adapted to her taste and habits, and she was remarkably adapted to that. Salem still retained much of its old character of combined economy, simplicity and intelligence. Social parties were managed with a view to rational enjoyment, not for display of any kind,—free from needless ceremony, and rarely so large as to interfere with the main purpose. Conversation and friendly intercourse were relied on for the chief entertainment. Caroline Plummer's expected presence was a sufficient attraction to all who loved such an entertainment, which she was so sure to afford. Yet she did not talk with apparent design to entertain—certainly not to set off her powers, of which she seemed unconscious; and this absence of all pretension added to the charm of her society. Her rich thoughts and sentiments flowed out spontaneously in appropriate language, often enlivened with genuine wit and humor. Her literary attainments, which were considerable, did not hang as ornaments on her mind to be displayed occasionally, but were so blended with her native good sense and the results of her own experience and observation, that they appeared alike natural and graceful;—and, what is perhaps a rarer excellence, her conversation was characterized by a

high moral tone and true dignity, being as free from all scandal as it was above mere frivolity.

But her bright social career was closed by a succession of domestic afflictions which are briefly recorded in the following inscriptions that she prepared for a monument which she contemplated erecting to the memory of her brothers:

THIS MARBLE is placed to the Memory of the Sons of Dr. JOSHUA and Mrs. OLIVE PLUMMER, as a tribute of the strongest and purest affection the human heart is capable of feeling, by a Sister, towards whom the Brothers united the characters of Parents, Children, the tenderest Friends and the sweetest companions.

LYMAN PLUMMER, aged 17; killed, June, 1805, by the Indians of the N. W. coast of America, while defending the property of another.

OCTAVIUS PLUMMER, aged 28; supposed to be shipwrecked on his passage from London to America, December, 1812.

THEODORE PARSONS PLUMMER, aged 27; died at Havana, November 9, 1813.

And under its shelter lie the ashes of ERNESTUS AUGUSTUS PLUMMER, aged 42; who died September 28, 1823.

The surviving sister, after years of lingering illness, died on the 15th of May, 1854. For more than thirty years, Miss Plummer lived, the last survivor of her worthy family, to every one of whom she had been bound by the strongest ties of love. Her seclusion from general society could not have been unexpected, though the soothing hand of time softened her grief and enabled her to enjoy the company of her chosen friends and the gratification of her refined tastes. Her favorite books, pictures, and other works of art, with which her rooms were adorned, and the kind friends who visited her in those rooms, afforded all the entertainment which she appeared to desire. Her nerves had been shattered, and her health so impaired, that she was ever after a suffering invalid. Yet she did not lose the vigor or the lofty aspirations of her mind. Among her most admired authors was Dr. Channing, and her intimate friends knew how earnestly she prayed for the strong and elevating faith which he so fully possessed. Her habits of strict economy might have appeared to superficial observers unworthy of her character, while her independent spirit and conscious rectitude made her indifferent to popular prejudice. Having determined to dispose of her large property for beneficent public purposes, she naturally discouraged applications for her contribution to other objects, not merely in accordance with the habits of her life, but because she wished to reserve all the property she could for her great intended purposes. She was a true daughter of Salem. "Charity and economy were nursed together," in the early years of each, and were followed in each by abounding wealth.

MISS PLUMMER'S BEQUESTS.

Plummer Professorship of Christian Morals.

By a codicil in her last Will, dated March 9th, 1845, Miss Plummer made provision for establishing a new Professorship in Harvard College, as follows:

"The estate of my late (entirely beloved) brother Ernestus Augustus Plummer, having fallen into my hands for disposal thereof, and I wishing to bequeath it as I think would be most agreeable to his wishes, do now, in fulfillment of what I verily believe would have been his wish, give and bequeath the sum of Twenty-five Thousand Dollars to the President and Fellows of Harvard College, which I direct to be safely invested or put at interest, and the income thereof to be forever appropriated for the support of a Professor of the Philosophy of the Heart and of the Moral, Physical and Christian Life, in Harvard University, whose province it shall be, according to rules and exercises established from time to time by the said President and Fellows, and on the basis of Christian faith and love, to enlighten all who are or may be engaged in the education pursued there, whether governors, instructors or students, in the manner of discharging their respective duties, so as best to promote generous affections, manly virtues and Christian conduct, and more especially, to aid and instruct the students in what most nearly concerns their moral and physical welfare, their health, their good habits, and their Christian character, acting towards them, by personal intercourse and persuasion, the part of a parent, as well as that of a teacher and friend.

The Professor shall be of the Christian religion, and a Master of Arts, and bearing the character of a learned, pious, and honest man. He shall be elected by the President and Fellows, and approved by the Overseers of Harvard College for such a term of years as may by them be ordered."

By a subsequent instrument the amount devoted by Miss Plummer to the purpose thus set forth, was reduced to Fifteen Thousand Dollars.

The Corporation of Harvard assumed the trust, and among the Rules and Statutes governing this trust are the following:

"The Professor shall be styled '*Preacher to the University and Plummer Professor of Christian Morals.*' His duties shall be:

1. To conduct the daily devotions in the College Chapel.
2. To be the preacher and pastor of those who worship in the College Chapel on the Lord's Day.
3. To give such moral and religious instruction to the undergraduates, whether by lectures or recitations, as shall be agreed upon in the assignment of studies by the College Faculty.
4. By counsel and sympathy, by personal intercourse, occasional voluntary meetings, and other suitable means, to warn and guard the students against the dangers to which they are exposed; to supply, as far as may be, their need of home influences, and to promote among them an earnest Christian faith and life.

It shall be at the option of the Professor, whether to belong to the College Faculty or not."

PLUMMER FARM SCHOOL.

The *Plummer Farm School*, intended for the instruction, employment and reformation of juveniles in the City of Salem, is founded on the following provision of Miss Plummer's Will:

"Said sum of ten thousand dollars so withdrawn,* also eight thousand dollars, which, in a former Will, I bequeathed to Oliver Keating, who is now deceased, together with all the residue of my estate that may remain after paying my debts, funeral charges, bequests and legacies hereinafter given, and executing my directions according to private memorandums (said memorandums not to be subject to Probate,) I give and bequeath to William I. Bowditch, in trust, to be appropriated to the founding of a Farm School of Reform for Boys,

* Withdrawn from the sum of $25,000, first designed for the Plummer Professorship.

for the City of Salem, in the County of Essex, State of Massachusetts, on a plan similar to that of the State Reform School. And I direct my said trustee to pay the same sums and residue, together with any interest that may have accrued thereon, to such trustees or their treasurer, as may be chosen by the Mayor and Aldermen of Salem, and incorporated by an act of the legislature with such powers and provisions as shall be judged best adapted to carry my said design of a Farm School of Reform into complete effect. And it is my will, that my said trustee, William I. Bowditch, shall not be required to give bonds as such trustee, I having full confidence that he will faithfully execute the same. Should these united sums be inadequate to the object, they shall be safely placed at interest until they amount to the sum deemed sufficient, unless a subscription be raised to supply any deficiency. In such case, my bequest aforesaid shall be used immediately for said Farm School of Reform."

The above bequest was accepted by the City Council, and in accordance with the terms of the Will, ten Trustees were chosen by the Mayor and Aldermen of the City of Salem, and an Act of Incorporation granted by the Legislature, May 21, 1855. The first meeting of the Board of Trustees was held November 26, 1855, at which time a code of By-laws was adopted and Officers were elected.

The amount of the Fund received from W. I. Bowditch, Esq., Trustee of the Will of Miss Plummer, July 1st, 1856, was $25,462.23.

PLUMMER HALL.

Under the following clause of Miss Plummer's Will, the sum named therein ($30,000) was paid over to the Trustees of the Salem Athenæum:

"I give and bequeath to the Proprietors of the Salem Athenæum the sum of Thirty Thousand Dollars, directing said bequest to be very distinctly recorded as a gift from my beloved brother Ernestus A. Plummer, I making the bequest in conformity to what I think would have been his wish, he having felt a deep interest in the welfare of this literary institution, and the observatory having been furnished with large additional funds. The said sum of thirty thousand dollars shall be appropriated to the purchasing a piece of land in some central and convenient spot in the City of Salem, and for building thereon a safe and elegant building of brick or stone to be employed for the purpose of depositing the books belonging to said Corporation, with liberty also to have the rooms thereof used for meetings of any scientific or literary institutions, or for the deposit of any works of art or natural productions. Should said library ever become a public one, this bequest shall not be forfeited. I expressly prohibit any part of said building or its cellar from being used as a public or private office of business or place for the sale or deposit of merchandise, being unwilling that said building should be used for any purpose which might endanger by fire the valuable library therein contained. The said building to be erected and the books belonging to the said Corporation to be deposited in it within three years from the time of receiving the legacy or of my decease. Said building to be kept constantly insured."

With this sum the Trustees of the Salem Athenæum have purchased a lot on Essex street, and erected a substantial, convenient, and elegant building for the accommodation of the Athenæum and the Essex Institute, of which the following is a description:

The building is in the form of a parallelogram, 97 feet 3 inches long by 53 feet wide. The exterior walls are faced with the best quality of pressed bricks and are 45 feet in height above the underpinning, which is 4 feet 6 inches high, and is of brown sandstone. The steps, doorway, window dressings, balcony, belts, etc., are also of the same material. The style of the building is the Romanesque.

The principal entrance is from the end or façade on Essex street. The first story is finished 16 feet 6 inches in height, and contains a vestibule 14 feet square with doors on the right and left side leading to rooms each 34 feet in length by nearly 16 feet in width; that on the left is appropriated to the herbarium of the Institute, and that on the right to the historical collection;—in the rear of the vestibule is the great staircase to the principal story, octagonal in

form and 18 feet in diameter, and is consequently not far from the centre of the edifice; beyond is the principal room, 58 feet long by 48 wide, which is also connected by doors with the two rooms above mentioned, and has been finished expressly for the accommodation of the geological, mineralogical and zoölogical departments; a light gallery, with a neat iron railing, extends entirely around the room, being constructed in a serpentine form, receding into each space between the cases, access to which is by two flights of spiral iron stairs, each 5 feet in diameter.

The stairs leading to the principal story commence at the bottom in two flights, each of which are 4 feet 6 inches wide, one on each side of the stair-room—they are continued in this manner to a height of ten feet, where they terminate at a landing, and are continued thence in a single flight 6 feet wide to the floor above; a fine dome is finished over the stair room with a colored glass centre at the apex; at the landing of the stairs on the principal floor is a vestibule corresponding to the one below, from which is a long window leading to the stone balcony over the principal entrance, also doors from the two sides to rooms of the same dimensions and form as those of the entrance story; that on the right is appropriated to the use of the Librarian, and for the deposit of some of the books of reference and the new books belonging to the Athenæum —that on the left to the bound volumes of newspapers of the Institute, and the Library of the Essex South District Medical Society, which contains about 700 volumes;—both of these rooms may be used as reading rooms.

The large Library room is in the rear, and is of the same dimensions as the principal room of the first story, viz., 58 by 48. It is entered by doors from the two rooms above named, and is finished in an elegant manner, having a range of Corinthian columns on either side, about 21 feet high, with an entablature above them, each range being 12 feet from the side walls, leaving a space of 24 feet between the ranges in the center of the room. The ceiling over the aisles or spaces, between the columns and walls, is horizontal, 24 feet high from the floor, and is neatly paneled. That over the nave or center compartment is arched its entire length, finishing 31 feet high from the floor, and is richly paneled in stucco. The cases on the sides of the alcoves are of a peculiar arrangement, commencing narrow at the back of the columns, and widening as they extend toward the sides of the rooms. The shelving being on each side and on the rear of the cases, also in the spaces between the windows. The nave is used for tables. A light balcony or gallery, similar to that in the room below, is constructed at the height of eight feet from the floor and is finished between the columns in a serpentine form, with a neat cast-iron railing. There is located at the rear end of the room a neat flight of spiral iron stairs, leading to the above-named balcony. The alcoves on the western side of this room contain the library of the Athenæum, those on the eastern that of the Institute.

NOTE.

The Salem Athenæum was instituted and incorporated in 1810. In the same year the books belonging to the Social Library, which was established in 1760, and the books of the Philosophical Library, which was established in 1781, were purchased by the Athenæum. The present number of volumes in the Library is about 12,000.

The Essex Institute was formed in 1848, by the union of the Essex Historical Society, which was organized in 1821, and the Essex County Natural History Society, which was established in 1833. It has an extensive and well-arranged cabinet of collections in history and natural science, and about 18,000 volumes, of which more than one-half were donated by Hon. D. A. White. In one of the rooms occupied by the Institute, is the Library of the Essex South District Medical Society.

The institutions accommodated by Plummer Hall embrace the great objects of Literary, Historical, and Scientific inquiry.

VI. EARLY TRAINING.

APHORISMS AND SUGGESTIONS—ANCIENT AND MODERN.

We are physiologically connected and set forth in our beginnings, and it is a matter of immense consequence to our character, what the connection is. In our birth we not only begin to breathe and circulate blood, but it is a question hugely significant whose the blood may be. For in this we have whole rivers of predispositions, good or bad, set running in us—as much more powerful to shape our future than all tuitional and regulative influences that come after, as they are earlier in their beginning, deeper in their insertion, and more constant in their operation.

Here, then, is the real and true beginning of a godly nurture. The child is not to have the sad entail of any sensuality, or excess, or distempered passion upon him. The heritage of love, peace, order, continence and holy courage is to be his. He is not to be morally weakened beforehand, in the womb of folly, by the frivolous, worldly, ambitious, expectations of parents-to-be, concentrating all their nonsense in him. His affinities are to be raised by the godly expectations, rather, and prayers that go before; by the steady and good aims of their industry, by the great impulse of their faith, by the brightness of their hope, by the sweet continence of their religiously pure love in Christ. Born, thus, of a parentage that is ordered in all righteousness, and maintains the right use of every thing, especially the right use of nature and marriage, the child will have just so much of heaven's life and order in him beforehand, as have become fixed properties in the type of his parentage.

Observe how very quick the child's eye is, in the passive age of infancy, to catch impressions, and receive the meaning of looks, voices, and motions. It peruses all faces, and colors, and sounds. Every sentiment that looks into its eyes, looks back out of its eyes, and plays in miniature on its countenance. The tear that steals down the cheek of a mother's suppressed grief, gathers the little infantile face into a responsive sob. With a kind of wondering silence, which is next thing to adoration, it studies the mother in her prayer, and looks up piously with her, in that exploring watch, that signifies unspoken prayer. If the child is handled fretfully, scolded, jerked, or simply laid aside unaffectionately, in no warmth of motherly gentleness, it feels the sting of just that which is felt towards it; and so it is angered by anger, irritated by irritation, fretted by fretfulness; having thus impressed, just that kind of impatience or ill-nature, which is felt towards it, and growing faithfully into

the bad mold offered, as by a fixed law. There is great importance, in this manner, even in the handling of infancy. If it is unchristian, it will beget unchristian states, or impressions. If it is gentle, ever patient and loving, it prepares a mood and temper like its own. There is scarcely room to doubt, that all most crabbed, hateful, resentful, passionate, ill-natured characters; all most even, lovely, firm and true, are prepared, in a great degree, by the handling of the nursery. To these and all such modes of feeling and treatment as make up the element of the infant's life, it is passive as wax to the seal. So that if we consider how small a speck, falling into the nucleus of a crystal, may disturb its form; or, how even a mote of foreign matter present in the quickening egg, will suffice to produce a deformity; considering, also, on the other hand, what nice conditions of repose, in one case, and what accurately modulated supplies of heat in the other, are necessary to a perfect product; then only do we begin to imagine what work is going on, in the soul of a child, in this first chapter of life, the age of impressions.

I have no scales to measure quantities of effect in this matter of early training, but I may be allowed to express my solemn conviction, that more, as a general fact, is done, or lost by neglect of doing, on a child's immortality, in the first three years of his life, than in all his years of discipline afterwards. And I name this particular time, or date, that I may not be supposed to lay the chief stress of duty and care on the latter part of what I have called the age of impressions; which, as it is a matter somewhat indefinite, may be taken to cover the space of three or four times this number of years; the development of language, and of moral ideas being only partially accomplished, in most cases, for so long a time. Let every Christian father and mother understand, when their child is three years old, that they have done more than half of all they will ever do for his character. What can be more strangely wide of all just apprehension, than the immense efficacy, imputed by most parents to the Christian ministry, compared with what they take to be the almost insignificant power conferred on them in their parental charge and duties. Why, if all preachers of Christ could have their hearers, for whole months and years, in their own will, as parents do their children, so as to move them by a look, a motion, a smile, a frown, and act their own sentiments and emotions over in them at pleasure; if, also, a little farther on, they had them in authority to command, direct, tell them whither to go, what to learn, what to do, regulate their hours, their books, their pleasures, their company, and call them to prayer over their own knees every night and morning, who could think it impossible, in the use of such a power, to produce almost any result? Should not such a ministry be expected to fashion all who come under it to newness of life? Let no parent, shifting off his duties to his children, in this manner, think to have his defects made up, and the consequent damages mended afterwards, when they have come to their maturity, by the comparatively slender, always doubtful, efficacy of preaching and pulpit harangue.

Dr. Bushnell. *Christian Nurture.*

Some recreations, to be taken from time to time, are not only always necessary, but are also expedient, because after such pauses the children return to their studies with more pleasure and earnestness.

Playing is also in itself a mark of activity of mind; and children who play in a slow and spiritless manner, will not show any remarkable aptitude for any branch of science.

Many plays, such as the answering of riddles, strengthen the reflective faculties; and afford the teacher valuable hints as to the character and capacity of the young people.

But on this subject also a judicious mean must be observed.

QUINTILIAN.

In education, as in the arts and sciences, and as in virtue itself, there are three things to consider; nature, instruction, and custom or practice.

Nature without instruction is blind. Instruction without nature is faulty; practice without either of them, is imperfect.

For as in farming, there are necessary good land, a good husbandman, and good seed, so must good natural endowments have the assistance of good teaching and admonition. PLUTARCH.

The younger any one is, the more easily can he be improved in morals; for virtue is in its essence natural to men, while vice is strange to them.

SENECA.

It is an evil thing when by reason of severe punishments, children become angry at their parents, or at enmity with their teachers.

For many unskillful school-masters injure excellent minds with their banging, scolding, rapping and beating, treating the children exactly as hangmen and jailers do a thief.

Solomon, who was a judicious school-master, did not prohibit scholars from sports at the proper time, as the monks do their pupils, who thus become mere logs and stocks, as Anselmus says.

A young man shut up in this way and kept apart from men is like a young tree which ought to bear fruit, but is planted in a kettle.

The monks shut up the young, as people do birds in a cage; so that they can neither hear nor see anybody, nor talk to any one. Such treatment is dangerous to youth.

Therefore they should be allowed to hear and see, and go about to various places, but should at the same time be made to behave decently and orderly. LUTHER.

The reflecting understanding teaches what is expedient with a view to goodness. But it is habit which gives men the real possession of the wisdom which they have acquired, and gives enduring strength in it.

PYTHAGORAS.

This is the most excellent way of living; to devote only so much care to the body as is sufficient for the health.

It should be kept under somewhat strict subjection, so as not to be disobedient to the mind.

Bodily exercises, if they are moderate, are useful, but those are harmful which are excessive, and make athletes. These latter obstruct the youth of the mind.

Light and easy exercises on the other hand, such as running races, swinging weights in the hand, and dancing, are beneficial.

Almost any bodily exercise, however, may be taken, if the student soon returns to his studies again.

The mind should be exercised both by day and by night. Moderate labor strengthens it.

Be solicitous to acquire one possession which will be sure to grow more valuable with age—good health.

The young ought not to sit constantly over books and by the study table.

Some repose should be given to the mind, but such as to refresh it; not to relax its efforts entirely.

However difficult it may be to root out bad habits when once fixed, still we ought no more to despair of doing it, than a physician should of curing a tedious disease, when the patient also is opposed to him.

Spoken words more easily make an impression, and are more easily remembered.

Modesty should be carefully cultivated. As long as it remains in the soul, there is hope of improvement.

Solitude is in various ways calculated to betray youth into all manner of wickedness.

As unhealthy localities endanger the firmest health, so are many places dangerous for the best dispositions.

Knowledge of youthful faults is the beginning of their cure. For how can he lay aside his vices, who considers them virtues?

For noble souls, work is nutriment.

It is not enough to begin the education; it must be continued.

It is better for a young man to be serious, than to be jovial and a favorite in large companies.

For it is with young people as it is with wine; that which is harsh when new, gains a fine flavor when it is old; but that which is sweet to begin with does not long retain its goodness.

For the sake of accommodating the weakness of pupils, speak to them often in parables.

In order to prepare good soil for the reception of instruction in wisdom and virtue, delusion and error must be extirpated.

As leaves can not grow green by themselves, but must have a twig to stand on and to draw sap through, so do the best precepts perish, if they stand alone, without being based upon substantial principles of instruction, and being rooted in such knowledge as is consistent with right and virtue. SENECA.

"Yes," people say, "they are only children; they do not understand what they are doing."

It is true.

But animals do not understand what they are doing; and yet we teach them to go and come, and to follow us, to do or not do this and that thing.

Wood or stone does not understand that it is proper to build houses of; but the artizan puts it into the proper shape.

How much more should the like be done for man!

Or do other people's children understand what they are doing, and is it your own children only who do not?

People who indulge their children must bear their sins, as much as if they had themselves committed them.

Another class of people who destroy their children are those who deal with them by shameful words and curses, and also who present to them evil examples and conduct.

These will in the end be well paid for their folly, because they will often feel grief and sorrow of heart by reason of their sons.

Also, children, as is the custom of fiery youth, are inclined to evil lusts and to anger.

Therefore is it necessary that their parents should give them no further occasion for such actions by words or gestures.

For what else can you expect a child who hears cursing an foul words at home, to learn, except cursing and foul words?

A third class who destroy their children, are those who teach their children to love the world; who care for them in nothing except to see that they go bravely, can dance and adorn themselves, can please people, gratify their desires, and make themselves part of the world.

No one ought to become a father until he is able to repeat to his children the ten commandments and enough of the gospels to make them good Christians.

But many persons hasten to enter the sacrament of holy matrimony when they can scarcely say the Lord's Prayer. They know nothing and can therefore neither recite nor teach their children anything.

Parents should instruct their children aright in the fear of God.

If Christianity is to become part of their mental character, instruction must be given from childhood up. I would even permit it to be given in the cradle.

I say and admonish; that children should timely be taught by warnings, fear, admonitions and punishment, to abhor lying, and especially of calling God to witness it.

It is most excellent to watch carefully over the young, and keep them under good discipline and in good habits; and to this end all possible industry should be exerted, to keep the young boys and girls from seeing and hearing any shameful thing; for they have abundance of evil desires in their blood without it. LUTHER.

To learn is, to proceed from something that is known, to the knowledge of something unknown.

Everything is learned, either by example, rule, or practice.

The truth is what must be held up before the understanding, the good before the will, the possible before the executive faculties; to which may be added practice, governed by rules.

Rules should not be set forth before examples.

In this particular artizans must be initiated; who do not deliver a theoretical lecture to their apprentice upon their trade, but cause him to observe how they, the masters, set about it.

Doing can only be learned by doing; writing by writing, painting by painting.

No second thing should be taken up until the first is well learned.

In connection with the second, repeat the first.

Teaching should be progressive; should proceed from the easy to the difficult; from few to many; from the simple to the compound; from the near to the more distant; from the regular to the irregular.

Actual intuition is better than demonstration.

It is useful to apprehend the same thing with several senses.

A matter is understood, when its inner nature is recognized in like manner as is its outer nature, by the senses.

For this inner comprehension is requisite a correct mental vision, a definite object, and persistent study.

Only one object should be considered at one time; and the whole of it first, and its parts afterward.

Memory has three purposes; to receive, to hold fast, to render up again.

The matters to be remembered must be distinct, connected, well-ordered; the mind not over-loaded with impressions, which will confuse each other, but calm, and directed only to one thing, and that with love or admiration.

Retention in the memory is facilitated by repetition; and recollection, by associated ideas.

The youngest children should be instructed in things visible.

Upon such, pictures make the deepest impression.

Examples are for them; and precept; but not abstract rules.

The teacher should not be too much of a genius.

Or if he is, let him learn patience.

It is not always the pupils who understand quickest who are the best.

The sloth of pupils must be compensated by the teacher's industry.

Beginners must work slowly; and then faster and faster, as they advance.

Learning will be pleasant to the pupils, if their teachers treat them in a friendly and suitable manner; show them the object of their work; do not merely listen to them but join in working with them and converse with them; and if sufficient variety is afforded.

It is especially important that the pupils should themselves be made to teach; Fortius says, that he learned much from his teachers, more from his fellow-pupils, and most from his scholars.

The school is a manufactory of humanity.

The art of training up men is not a superficial one, but one of the profoundest secrets of nature and of our salvation. COMENIUS.

Be careful of your children and of their management. As soon as they begin to creep about and to walk, do not let them be idle.

Young people must have something to do, and it is impossible for them to be idle.

Their bodies must be kept in constant activity; for the mind is not yet able to perform its complete functions.

But in order that they may not occupy themselves in vicious or wicked ways, give them fixed hours for relaxation; and keep them all the rest of the time, as far as possible, at study or at work, even if of trifling usefulness, or not gainful to you.

It is sufficient profit if they are thus kept from having an opportunity for evil thoughts or words.

Therefore it is that children are nowhere better situated than at school or at church. MOSCHEROSCH.

Domestic government is the first of all; from which all governments and dominions take their origin.

If this root is not good, there can be neither good stem nor good fruit from it.

Kingdoms, moreover, are made up of single families.

Where fathers and mothers govern all at home and let their children's obstinacy prevail, neither city, market, village, country, principality nor kingdom can be governed well and peacefully. LUTHER.

Doctor Martin Luther wrote to his son as follows: Grace and peace in Christ, my dear little son. I see with pleasure that you learn well and pray constantly. Continue to do so, my son. When I come home, I will bring you a beautiful present.

I saw a beautiful pleasant garden, where many children were walking, with golden clothes, and eating beautiful apples under the trees, and pears and cherries and plums, and were singing and jumping and enjoying themselves; and they had beautiful little ponies with golden bridles and silver saddles.

Then I asked the man who owned the garden, what children these were. And he said, "These are the children who pray willingly, learn well and are good."

Then I said, "Dear man, I also have a son, called Hänschen Luther. May he not also come into the garden, so that he can eat such beautiful

apples and pears, and ride such pretty ponies, and play with these children?"

Then the man said, "If he prays willingly, and learns well and is good, then he may come into the garden, and Lippus and Jost too; and if they all come, they shall have fifes and drums and singing and all sorts of stringed instruments, and dance and shoot with little cross-bows."

And he showed me an open meadow in the garden, arranged for dancing; and there were hanging up many golden fifes and drums and silver cross-bows.

But this was quite early, and the children had not dined; so that I could not wait to see the dancing. So I said to the man, "Ah, my dear sir; I will go at once and write all this to my dear little son Hänschen, so that he shall pray constantly and learn well and be diligent, so that he also may come into the garden; but he has an aunt Lehne, whom he must bring with him."

Then the man said, "It shall be so; go and write so to him."

Therefore, dear little son Hänschen, learn and pray with good courage, and tell Lippus and Jost also, so that they may pray and learn also, and then you can all three be admitted into the garden.

And now you are commended to the Almighty God. And greet aunt Lehne; and give her a kiss for me. LUTHER.

As birds are born with the power of flying, horses with that of running, and beasts of prey with a furious courage, so is man born with the peculiar faculty of thinking, and of mental activity.

Therefore do we ascribe to the soul a heavenly origin.

Defective and under-witted minds, mental abortions and monstrosities, are as rare as bodily deformities.

Not one individual can be found who can not by labor be brought to be good for something.

Any one who considers this will as soon as he has children devote the utmost care to them. QUINTILIAN.

The symptoms of children's inclinations are so slight and obscure, and the promises so uncertain and fallacious, that it is very hard to establish any solid judgment or conjecture upon them.

A tutor should have rather an elegant than a learned head, though both, if such a person can be found; but, however, manners and judgment should be preferred before reading.

'Tis the custom of schoolmasters to be eternally thundering in their pupils' ears, as they were pouring into a funnel. Now I would have a tutor to correct this error, and that, at the very first outset, he should, according to the capacity he has to deal with, put it to the test, permitting his pupil himself to taste and relish things, and of himself to choose and discern them, sometimes opening the way to him, and sometimes making him break the ice himself.

Socrates, and since him, Arcesilaus, made first their scholars speak, and then spoke to them.

'Tis the effect of a strong and well-tempered mind to know how to condescend to his pupil's puerile notions and to govern and direct them.

Let the master not only examine him about the bare words of his lesson, but also as to the sense and meaning of them, and let him judge of the profit he has made, not by the testimony of his memory, but by that of his understanding.

Let him make him put what he hath learned into a hundred several forms, and accommodate it to so many several subjects, to see if he yet rightly comprehend it, and has made it his own. 'Tis a sign of crudity and indigestion, to throw up what we have eaten in the same condition it

was swallowed down; the stomach has not performed its office, unless it hath altered the form and condition of what was committed to it to concoct.

Our minds work only upon trust, being bound and compelled to follow the appetite of another's fancy; enslaved and captive under the authority of another's instruction, we have been so subjected to the trammel that we have no free nor natural pace of our own.

Let the tutor make his pupil examine and thoroughly sift everything he reads, and lodge nothing in his head upon simple authority and upon trust.

Bees cull their several sweets from this flower and that blossom, here and there where they find them, but themselves after make the honey, which is all and purely their own, and no longer thyme and marjoram.

So the several fragments the pupil borrows from others he will transform and blend together to compile a work that shall be absolutely his own.

To know by rote is no knowledge.

Our pedagogues stick sentences full feathered in our memories, and there establish them like oracles, of which the very letters and syllables are the substance of the thing.

I could wish to know whether a dancing-master could have taught us to cut capers by only seeing them do it as these men pretend to inform our understandings, without ever setting them to work, and to make us judge and speak well, without exercising us in judging and speaking.

'Tis the general opinion of all, that children should not be brought up in their parents' lap. Their natural affection is apt to make the most discreet of them over-fond.

It is not enough to fortify a child's soul, you are also to make his sinews strong; for the soul will be oppressed, if not assisted by the body.

A boy must be broken in by the pain and hardship of severe exercise, to enable him to the pain and hardship of dislocations, colics, and cauteries.

Let conscience and virtue be eminently manifested in the pupil's speech. Make him understand that to acknowledge the error he shall discover in his own argument, though only found out by himself, is an effect of judgment and sincerity, which are the principal things he is to seek after, and that obstinacy and contention are common qualities, most appearing in an l best becoming a mean soul.

Let him examine every man's talent; and something will be picked out of their discourse, whereof some use may be made at one time or another. By observing the graces and manners of all he sees, he will create to himself an emulation of the good, and a contempt of the bad.

Let an honest curiosity be planted in him to enquire after every thing, and whatever there is of rare and singular near the place where he shall reside, let him go and see it.

Methinks the first doctrine with which one should season his understanding, ought to be that which regulates his manners and his sense; that teaches him to know himself, and how both well to die and well to live.

How many have I seen in my time, totally brutified by an immoderate thirst after knowledge!

Our very exercises and recreations, running, wrestling, music, dancing, hunting, riding, and fencing, will prove to be a good part of our study.

I would have the outward behavior and mien, and the disposition of the limbs, formed at the same time with the mind.

It is not a soul, it is not a body, that we are training up; it is a man, an l we ought not to divide him into two parts; and, as Plato says, we are not to fashion one without the other, but make them draw together like two horses harnessed to a coach.

As to the rest, this method of education ought to be carried on with a firm gentleness, quite contrary to the practice of our pedants, who, instead of tempting and alluring children to letters, present nothing before them but rods and ferules, horror and cruelty. Away with this violence! away with this compulsion! than which, I certainly believe nothing more dulls and degenerates a well-born nature.

If you would have a pupil fear shame and chastisement, do not harden him to them.

Some of our colleges are mere gaols, where imprisoned youths are taught to be debauched by being punished for it before they are so.

How much more decent would it be to see their classes strewed with leaves and flowers, than with bloody stumps of birch!

Were it left to my ordering, I should paint the school with pictures of joy and gladness, Flora and the graces, as the philosopher Speusippus did his.

A man should not so much repeat his lesson as practice it; let him repeat it in his actions. MONTAIGNE.

Man is the product of his education.

At the moment when the human being first receives life and motion, he receives his first instruction.

It is from the mother that the child receives health or sickness.

Scarcely is he born before he signifies his existence by crying.

Hunger pains him, and he feels the necessity of opening his lips and drawing his nourishment from the bosom of his nurse.

When a few months have passed, his looks become more decided and his limbs stronger; and he becomes by little and little more capable of receiving impressions.

The senses of right, hearing, taste, feeling and smell, develop more and more.

All the objects of nature around him operate upon him, and impress ideas upon his memory.

All the different susceptibilities which agitate during this period, are his instructors. HELVETIUS.

It is easy to see how dangerous and injurious an unnatural education may be, by forestalling the systematical and appropriate course of nature, and to prevent such a bringing up as is shown by experience to be the only mode of attaining to a satisfactory standard of morality.

But a system of education, directed only to the purpose of making man independent, instead of laying heavy chains upon him—would not such a system lead towards true perfection, and thus towards securing the happiness of our race? FORSTER.

I would put myself in the place of a father who has a son to educate.

My first care should be, to make him firm and strong in body; and also to strengthen his mind, according to the principles of the stoics.

It is easy to form the character of a young child in any way desired; but extremely difficult to change a character once formed and established.

But since nothing is more fit to accustom a child to be honorable, and reasonable, and to control his passions, than example and company, therefore I must take the utmost pains myself to furnish my son such an example and such company as I wish him to be formed by.

Mere association with a virtuous man will always have more influence upon the heart, than all possible moral precepts and rules. WEIKARD.

The domestic relations of man are the earliest, and most important, in nature.

Therefore art thou, parental home, the foundation of all the purely natural education of man.

Parental home, thou school of manners and of the State!

First, O man, thou art a child; and afterwards a pupil in thy vocation!

Childish virtue is the blessing of thy days of study, and the first training of thy powers to the enjoyment of all the blessings of life.

He who varies from this natural order, and makes unnaturally specific separate courses of education for politics, professions, authority or serving, directs humanity aside from the enjoyment of the most natural blessings, into a rocky sea.

Do you not see, O men—do you not feel, sons of earth—how your higher classes are destroying their innate powers by their education?

Dost thou not see, humanity, how their departure from the wise order of nature, brings emptiness and fatal curses upon them, and downward from them upon their people?

Dost thou not feel, O earth, how the human race departs from the true blessedness of its domestic relations, and betakes itself in all directions to barbarous and silly theatrical performances, to see their own wisdom mirrored, and to tickle their own vanity? PESTALOZZI.

We recognize clearly enough such superiorities as ancient Greece and Rome possessed over us, in internal arrangements, manners and customs; but there is no one who seeks to bring them into practice.

It was the similarly powerful and universal education of body and mind, that elevated these nations so high above us, notwithstanding that we boast of possessing the highest civilization.

We say over their words after them, but where are the deeds?

Our so-called gymnasia are now exactly as they long have been; in a state of what is taught in them about the Greeks and Romans, and which is a real satire on both.

But these people are no longer among the nations; and those who claim descent from these ancient heroes, are degenerate, and far beneath their courage and their power.

But is this good reason for neglecting what we admit to be valuable?

And why do we imitate words, but not actions? The Greeks and Romans were great in both; but with them the words were the consequence of the deeds.

They had themselves heard the roaring of the ocean and the neighing of horses; they had themselves appeared in the rage of battle, as fellow soldiers, brave defenders of freedom.

It must have been easy for them to think strong and great thoughts.

The education of their minds culminated in that of their bodies.

TETZNER.

With speaking, children commence a new period of life. It takes the place of crying.

In what nature indicates as adapted to bodily development, children should have the utmost possible freedom; as in running, jumping, &c.

Nothing should be yielded to ill-tempered crying.

Neither however should the children be taught to make demands in a polite style.

Not everything which the child demands should be granted him. Otherwise his requirements would have no limits; no one but God himself could satisfy them.

Grown people should no more tyrannize over children, and thus intimidate them, than children should be permitted to command.

Children should not be reasoned with, as Mr. Locke recommends; for the understanding is the last of all the mental powers to develop.

If children understood reasonable considerations, they would not need to be educated.

And by speaking to them from an early period in terms which they do not understand, they become accustomed to be contented with mere words, to criticise everything that is said to them, to think themselves as wise as their teachers, to be disputatious and obstinate, and to do what it is fancied they are doing on reasonable principles, merely out of gluttony or fear or vanity, which motives it is necessary to call into activity as auxiliaries.

Children should be permitted to be children.

By using a reversed order of teaching, we obtain only premature and flavorless fruits, which soon perish; we shall have young doctors and old children. You can as easily bring a child to be four feet high, as to have judgment in his tenth year.

Yield to them with pleasure, and deny them with reluctance.

But when you deny them, let it not be in an unpleasant manner. And let no persistency induce you to withdraw your negative. In this particular there is no middle path.

Either nothing at all, or the most absolute and unconditional obedience, should be required of children.

It is the very worst sort of education to let a child be wavering between his will and your own, and to be incessantly disputing with him, which shall be master.

It is difficult and perhaps impossible to guard children completely against bad influences, even in the country.

The bodies of pupils should be exercised in all ways. It is a great error to suppose that such a course interferes with mental training.

The senses are the first powers to develop in a child; and their perfection should therefore be first attended to.

Let them measure, count, weigh and compare.

The blind have the finest sense of touch.

Seeing children may cultivate their senses to an equal extent by exercising and playing in the dark.

The sense of vision often errs, and leads to over hasty judgments.

Children's plays should exercise not only their eyes, but all their organs.

Wo to boys who have no longer any respect for authority; who are destitute of respect and love for their parents and teachers!

Geographical instruction should begin at the house and the locality of residence.

The pupil should draw maps of the neighborhood, so as to learn how maps are made, and what they represent.

In investigating natural laws, always begin with the most common and obvious phenomena.

Let the child learn what is appropriate for his years; not precociously, what he ought to learn afterwards.

What it requires an appeal to a boy's vanity to induce him to learn, he had better not learn at all.

Out of books, we learn to talk of what we do not understand.

The teacher should, with his pupil, attend workshops; and should permit the latter to work with his own hands; which will enable him to understand things better than explaining them.

Educating men for one particular condition, makes them unfit for and unsuccessful in any other, in case of a change in their circumstances.

The great secret of education is, so to order it as that mental and bodily exercises shall serve as recreations, each from the other.

After the body and the soul of the pupil have first been trained, then his understanding and his judgment should be trained.

Pupils should be warned not to mistake mere brilliant appearances for true and desirable happiness. ROUSSEAU.

How important is it, above all things, that every father and every mother should care for the bodily health of their children! since their minds must, without a sound and perfect bodily instrument, be condemned to misery. ZSCHOKKE.

All children, even the best, have their periods of energy and of fatigue; and the teacher needs to study the symptoms of such changes, to avoid greatly abusing the child's mental constitution.

To recite and recite continually, and to solve problems within a specified time, places an unnatural constraint upon the freedom of the impulses and movements of the mind.

It is a remarkable and beautiful thing for a boy to apply himself with all the force of his being to the work required of him.

But he is also in need of rest, of solitude, where he may on quiet holidays collect his thoughts, and feel himself relieved of any purpose whatever, even of his own childish whims.

Moreover, there is both in men and children, a limit to the power of the susceptibilities both to things new and old.

Periods of rest are necessary, so that body and mind may recover their exhausted strength.

During such periods the pupil also really learns; for unknown to himself he is recognizing what is before him; and such new activities of the thoughts are more efficient in producing new combinations of ideas than all the teacher's art.

Plato's principle, that "the gods are the friends of amusement," should be a motto over the door of every home; and Anaxagoras' testamentary provision that "on the day of his death the children should play," has a deep significance.

An unlimited series of ideas, without reflection, and not restricted in purpose, beginning, progress or end—the characteristics which distinguish play from work—is as natural and necessary to a child's nature as breathing.

Those are wise parents who play much with their children.

The greater the mental activity, the more and more enjoyed is the playing.

But there should be order and proportion in all things.

The most simple, formless, and modifiable material is best for playthings.

There is great significance in children's playing.

Show me how you play, and I will show you what you will be.

STOY.

How is it that "gymnasium" now only means a place where young people sit still; where they deteriorate their bodies? The name means a place for training the body. With the Greeks there were deeds; with us, only talking about them. GOETHE.

There must be more definite and complete psychological and physiological investigations of the relation between the labor and the recreation of young persons; for it is evident that a natural impulse inclines children to play and to the development of their bodies, as their most proper destination. SCHRÖDER.

"The profit of study," says Heumius, "depends upon the intervals which are devoted to recreation."

It is only in some degree of quiet that the mind can digest the impressions made upon the memory or the fancy, and can make them its nutriment.

Incessant cramming only deadens and tends to stupidity; and it is probably psychologically true, as Lorinser quotes from H. Horst, "That in order to learn with pleasure and success, only a little must be heard or read."

How much more influential, even for a whole life, is often a single word spoken at a fortunate moment, than whole years of teaching!

Why is it that mature minds learn in a short time, by much less reading or teaching, quite as much as one who does nothing but hear instruction and study day after day?

Therefore it seems to be real barbarism and misunderstanding of the youthful character, to believe as the directors of some gymnasia do, that all depends upon incessant stimulation, inspection and manipulation by the teachers, and upon not waiting a single minute of the hour, upon going through the whole lesson without once taking breath, upon a state of incitement, wearing, stupifying and loathsome both to teachers and pupils.

Each school ought to have roofed and open play and gymnastic grounds, yards, gardens and halls, and after every lesson the pupils should be obliged to go out of the schoolroom—for our precocious and self-isolating and overwise young people are partly too lazy and partly too proud, to play—and run about a quarter of an hour in the fresh air, than to return, strengthened and refreshed, to their labor.

Whatever is thus wanted in time, will be richly compensated by the greater vigor and activity of the school.

ROTTECK AND WELCKER. *State Lexicon.*

Education should at first be more negative than positive in its operation.

It should especially seek to remove the hindrances to free self-direction; and should aim to render the will free, so that this free self-direction may be guided towards reasonable objects.

The educator should not so much form and instill, as develop, and call out. C. F. MICHAELIS.

The young mind should be nourished with simple and grateful food, and not too copious. It should be little exercised until its nerves and muscles show themselves, and even then rather for air than any thing else. Study is the bane of childhood, the aliment of youth, the indulgence of manhood, and the restoration of age.

Before that age [five] how many seeds are sown, which future years and distant ones, mature successively! How much fondness, how much generosity, what hosts of other virtues, courage, constancy, patriotism, spring into the father's heart from the cradle of the child! And does never the fear come over a man that what is most precious to him upon earth is left in careless or perfidious, in unsafe or unworthy, hands?

Walter Savage Landor. *Pericles and Aspasia.*

The recollection of a thoroughly happy childhood (other advantages not wanting) is the very best preparation, moral and intellectual, with which to encounter the duties and cares of real life. A sunshiny childhood is an auspicious inheritance, with which, as a fund, to commence trading in practical wisdom and active goodness. It is a great thing only to have known, by experience, that tranquil, temperate felicity is actually attainable on earth; and we should think so, if we knew how many have pursued a reckless course, because, or chiefly because, they early learned to think of *Happiness* as a chimera, and believed momentary gratifications to be the only substitute placed within the reach of man. Practical happiness is much oftener wantonly thrown away, than really snatched from us; but it is the most likely to be pursued, overtaken, and husbanded, by those who already, and during some considerable period of their lives, have been happy. To have known nothing but misery is the most portentous condition under which human nature can start on its course. Isaac Taylor. *Home Education.*

What would be the condition of all our families, of all our children, if religious fathers and religious mothers were to teach their sons and daughters no religious tenets till they were eighteen? What would become of their morals, their character, their purity of heart and life, their hope for time and eternity? What would become of all those thousand ties of sweetness, benevolence, love, and Christian feeling, that now render our young men and young maidens like comely plants growing up by a streamlet's side; the graces and the grace of opening manhood, of blossoming womanhood? What would become of all that now renders the social circle lovely and beloved? What would become of society itself? How could it exist? And is that to be considered a charity which strikes at the soul of all this; which subverts all the excellence and the charms of social life; which tends to destroy the very foundation and framework of society, both in its practices and in its opinions; which subverts the whole decency, the whole morality, as well as the whole Christianity and government of society? No, sir! No, sir!

Daniel Webster. *Girard's Will Case.*

VII. PLAYS, PASTIMES, AND HOLIDAYS OF CHILDREN.

BY HORACE BUSHNELL, D. D.

[We are firm believers in the efficacy of play—in the ring of happy voices of boys and girls engaged in their innocent sports—in the rights of children to significant and frequent holidays—and that all needless restrictions, which limit or repress the natural outburst of youthful spirits, beyond the necessities of the child's true development, spiritual as well as physical and intellectual, should be discarded from the home, the play-place, and the school.

We have nowhere met a more acceptable embodiment of our views than in a chapter of Dr. Bushnell's Christian Nurture, entitled "Plays and Pastimes, Holidays and Sundays," a portion of which we transfer to our pages.]

"Having set the young of all the animal races a playing, and made their beginning an age of frisking life and joyous gambol, it would be singular if God had made the young of humanity an exception; or if, having put the same sportive instinct in their make, he should restrict them always to a carefully practical and sober mood. What indeed does he permit us to see, in the universal mirth-time which is given to be the beginning of every creature's life, but that he has, Himself, a certain pleasure in their exuberant life, and regards their gambols with a fatherly satisfaction? What, too, shall we judge, but that as all instincts are inserted for that to which they tend, so this instinct of play in children is itself an appointment of play?

Besides, there is a very sublime reason for the play-state of childhood which respects the moral and religious well-being of manhood, and makes it important that we should have our first chapter of life in this key. Play is the symbol and interpreter of liberty, that is, Christian liberty; and no one could ever sufficiently conceive the state of free impulse and the joy there is in it, save by means of this unconstrained, always pleasurable activity, that we call the play of children. Play wants no motive but play; and so true goodness, when it is ripe in the soul and is become a complete inspiration there, will ask no motive but to be good. Therefore God has pur-

posely set the beginning of the natural life in a mood that foreshadows the last and highest chapter of immortal character. Just as he has made hunger in the body to represent hunger in the soul, thirst in the body to represent thirst in the soul; what is sweet, bitter, sour in the taste to represent what is sweet, bitter, sour in the soul's feeling; lameness to represent the hobbling of false principle; the fierce combustion of heat to represent the rage of angry passion; all things natural to represent all things spiritual,—so he prepares, at the very beginning of our life, in the free self-impulsion of play, that which is to foreshadow the glorious liberty of the soul's ripe order and attainment in good. One is the paradise of nature behind us, the other the paradise of grace before us; and the recollection of one images to us, and stimulates us in, the pursuit of the other.

Holding this conception of the uses, and the very great importance of play, as a natural interpreter of what is highest and best in the grand problem of our life itself, we are led, on sober and even religious conviction, to hold in high estimation the age of play. As play is the forerunner of religion, so religion is to be the friend of play; to love its free motion, its happy scenes, its voices of glee, and never, by any needless austerities of control, seek to hamper and shorten its pleasures. Any sort of piety or supposed piety that is jealous of the plays and bounding activities of childish life, is a character of hardness and severity that has, so far at least, but a very questionable agreement with God's more genial and fatherly feeling. One of the first duties of a genuinely Christian parent is, to show a generous sympathy with the plays of his children; providing playthings and means of play, giving them play-times, inviting suitable companions for them, and requiring them to have it as one of their pleasures, to keep such companions entertained in their plays, instead of playing always for their own mere self-pleasing. Sometimes, too, the parent, having a hearty interest in the plays of his children, will drop out for the time the sense of his years, and go into the frolic of their mood with them. They will enjoy no other play-time so much as that, and it will have the effect to make the authority so far unbent, just as much stronger and more welcome, as it has brought itself closer to them, and given them a more complete show of sympathy.

On the same principle, it has an excellent effect to make much of the birthdays of children, because it shows them, little and dependent as they are, to be held in so much greater estimation in the house. When they have each their own day, when that day is

so remembered and observed as to indicate a real and felt interest in it by all, then the home in which they are so cherished is proportionally endeared to feeling, and what has magnified them they are ready to magnify.

On the same principle, too, public days and festivals, those of the school, those of the state, and those of religion, are to be looked upon with favor, as times in which they are to be gladdened by the shows, and plays, and simple pleasures appropriate to the occasions; care being only taken to put them in no connection with vice, or any possible excess. Let them see what is to be seen, enjoy what is to be enjoyed, and shun with just so much greater sensibility whatever is loose, or wild, or wicked.

Religious festivals have a peculiar value to children; such I mean as the festivals of Thanksgiving and Christmas—one a festival of thanks for the benefits of Providence, the other for the benefits of that supernatural providence which has given the world a Saviour and a salvation. Both are religious, and, in that fact, have their value; for nothing will go farther to remove the annoyance of a continual, unsparing, dry restraint upon the soul of childhood, and produce a feeling, as respects religion, of its real genial character, than to have it bring its festive and joyously commemorative days. One of the great difficulties in a properly religious nurture is, that religion has to open its approaches to the soul, and make its beginnings in the shape of law; to say God requires of you this, forbids you in that, makes it your life to be set in all ways of obedience. It takes on thus a guise of constraint, and so far wears a repulsive look; but if it can show how genial it is, how truly it loves even childish enjoyment, by gilding for it days of joy and festive celebrations, then the severities of law and responsible obedience take on themselves a look of benignity, and it begins to be felt that God commands us, not to cripple us, but to keep us safe and lead us into good. Such days, it is true, may be greatly abused by what is really unchristian; what is sensual and low, and very close to vice itself; and it is much to be regretted that the Christmas festival, otherwise so beautiful and appropriate, taken as a Christian commemoration of the greatest fact of the world's history, has been so commonly associated with traditional looseness and excess. The friends of such a day can not do it any so great honor, as to clear it entirely of the excess and profane jollity by which it was made to commemorate any thing and every thing but Christ, that, setting it in character as a genuine religious festivity, they may give it to all friends of Christ as a day of universal observance.

Happily there is now such an abundance of games and plays prepared for the entertainment of children, that there is no need of allowing them in any that stand associated with vice. Those plays are generally to be most favored that are to be had only in the open air, and in forms of exercise that give sprightliness and robustness to the body. At the same time, there needs to be a preparation of devices for the entertainment of children indoors in the evening; for the prophet did not give it as a picture of the happy days of Jerusalem, that the streets of the city should be full of boys and girls playing there in the evening, or into the night, away from their parents and the supervision of their home. There is any thing signified in that but happiness and public well-being. Christian fathers and mothers will never suffer their children to be out in the public streets in the evening, unless they are themselves too loose and self-indulgent to assume that care of the conduct and the hours of their children, which is imposed upon them by their parental responsibilities. In country places, far removed from all the haunts of vice, and in neighborhoods where there are no vicious children, it might work no injury if boys were allowed to be out, now and then, in their coasting or skating parties in the evening. But the better rule in large towns, the absolute rule, having no exceptions as regards very young children, will be that they are never to be out or away from home in the evening. Meantime, it will be the duty of the parents, and a kind of study especially of the mother, to find methods of making the house no mere prison, but a place of attraction, and of always cheerful and pleasant society. She will provide books that will feed their intelligence and exercise their tastes, pictures, games, diversions, plays; set them to inventing such themselves, teaching them how to carry on their little society, in the playful turns of good nature and fun, by which they stimulate and quicken each other; drilling them in music, and setling them forward in it by such beginnings that they will shortly be found exercising and training each other; shedding over all the play, infusing into all the glee, a certain sober and thoughtful look of character and principle, so that no overgrown appetite for sport may render violent pleasures necessary, but that small, and gentle, and easy, and almost sober pleasures, may suffice; becoming, at last, even most satisfactory. Here is the field of the mother's greatest art, viz.: in the finding how to make a happy and good evening for her children. Here it is that the lax, faithless, worthless mother most entirely fails; here the good and wise mother wins her best successes.

Meantime some care must be exercised, that the religious life

itself be never set in an attitude of repugnance to the plays of childhood. There must be no attempt to raise a conscience against play. Any such religion will certainly go to the wall; any such conscience will be certainly trampled, and things innocent will be done as if they were crimes; done with a guilty feeling; done with as bad effects every way, on the character, as if they were really the worst things. Nothing is more cruel than to throw a child into the attitude of conflict with God and his conscience, by raising a false conscience against that which both God and nature approve. It is nothing less than making a gratuitous loss of religion, required by no terms of reason, justified by no principle, even of Christian sacrifice itself.

Suppose, for example, that a child has begun to show many pleasant evidences of love to God and all good things, but that he is eager still in play, or sometimes gets quite wild in the excitement of it. If, at such a time, it is sprung upon him, as a conclusion, that he does not truly love God, because he is so much taken by the excitements of play, he will thus be discouraged without reason, in all his confidences of piety, and it will be strange, if by-and-bye he does not begin to show a settled aversion to religious things. How can he do less, when he is compelled to see it, as in conflict with all the most innocent and most truly natural instincts of his age? Or, to make the case more plain, drawing the question to a closer point, suppose the child, having so many evidences of piety in his dispositions, to be found at some kind of play in the family prayers, or that he rushes out from such prayers, in a manner that indicates eagerness and an emancipated feeling, or that he sometimes shows uneasiness in the hours of public worship on Sunday, or gives manifest tokens, in the morning, of a desire to escape from it, is it then to be set down, in your parental remonstrances with him, that he has, of course, no love to God, or the things of religion? By no means. How often does the adult Christian feel even a disinclination to such things; how often hurry away from his formal prayer, that he may get into his shop, or his field, or into some negotiation that has haunted his sleep in the night; how often sit through sermons with his mind on the game of politics, on the investment made or to be made; on his journey, or his mortgage, or the rivals he has in his trade? Is it worse for a child to be after his plays, with only the same kind of eagerness? Doubtless all such engrossments of the soul, whether of one kind or the other, are to be taken as bad signs, and, as far as they go, to be allowed their due weight. But which is worse and more fatal, the child's

undue possession by the spirit of play, or the man's by the spirit of gain—the honest, artless, letting forth of nature by one, or the deliberate, studied, scheming of the other—it is not difficult, I think, to guess. No matter if the latter is more sober and thoughtful in the mood, observing a better show of gravity. For just that reason he is only to be judged the more harshly. If then we can bear with adult Christians, who are much in the world, and, forgetting themselves often, fall into moods of real disinclination to their duty, are we to set it down as some total evidence against the piety of a child, that, by mere exuberance of life, he is occasionally hurried away from sacred things, into matters of play? Nothing is more unjust. Why should we require it of a child to be perfect, when we do not require it of a man? And if we tolerate inconstancy of feeling or impulse in one, why not a much less worldly and deliberate inconstancy in the other?

Thus far we speak for the side of play, showing how far off it is from the purpose of religion to take away, or suppress, the innocent plays of childhood; how ready it is, on the other hand, to foster them and give them sympathy. But it is not the whole of life, even to a child, to be indulged in play. There is such a thing as order, no less than such a thing as liberty; and the process of adjustment between these two contending powers, begins at a very early date. Under the law of the house, of the school, and of God, the mere play impulse begins very soon to be tempered and moderated by duty, and the problem is to make divine order itself, at last, a state of liberty analogous to the state of play, as already suggested. But the law that is to fashion such order will be first felt as a restriction; then, when it becomes the spirit of the life, the order itself will be liberty. There is no such thing, therefore, as a possibility to childhood of unrestricted play. Restriction must be encountered as often as the order of the house demands it, then as often as the school demands it, then as often as the duties of religion demand it. Though such restrictions are never to be looked upon as hostile to the child's play, but only as terms that are really necessary for his training into the organic relations under which he is born, best for his character, and even best for the enjoyments of his play itself. Otherwise he would either become sated by it in a short time, or his appetite for it would become so egregiously overgrown, that no possible devices or means could be invented to keep pace with it. Besides, a child, thus put to nothing but mere play, would very soon grow into such lightness and dissipation of feeling,

as to be mentally addled, and would so be wholly incapacitated for any of the more sober and manly offices of life.

Here, then, begins a process of training into moral order, which, without wishing to be any restriction upon play, is yet of necessity such a restriction. The child is required to conform his conduct, including his plays, to the peace of the house, to the conditions of sick persons in it, to the hours and times and general comfort of other inmates older than himself. Errands are put upon him that require him to forego his pleasures. When he is old enough, he is set to works of industry, it may be, that he may contribute something to the general benefit. By all which restrictions of play, he is only prepared to enjoy his pastimes and plays the more. The restrictions he will doubtless feel, at the time, and may be somewhat restive under them; but when he is thoroughly brought into the order of the house, and is set in the habit of serving it, as an interest of his own, then he will obey, contrive, and work, and even drudge himself to serve it, constrained by no motive but the service itself.

In the same manner it will be laid upon him to be at his place in the school, to be punctual to his times, to miss no lesson, to hold his mind to his studies by close, unfaltering application, even though it cost him a loss of just that liberty in play that he would most like, and take it as the very bliss of his good fortune to have. Restricted thus by the order of the school, he will only enjoy his play-times the more, and finally will come to the enjoyment of study itself for its own sake.

And so it will be in religion. There must, of course, be in it, what may be called restrictions upon children. All law is felt as restriction at the first, but it will not be that God makes war on their innocent plays; they only need as much, to be established in right conduct, well-doing, and piety, as to have their indulgence in such pleasures. If God will take them away from all misrule and wretchedness, and will bring them into all best conditions of blessedness and peace, and even of liberty itself, he must put them under his commandments, train them into his divine will, and settle them in his own perfect order; and if he is obliged, in such a design, to infringe here and there upon their plays, it is not because he likes the infringement, but only that he seeks the higher bliss of character for them. Thus when a little child is required to say his prayers and retire at the proper time for sleep, there is nothing to complain of in that kind of constraint, even though he wants to continue his play; for the thing required is plainly for his good—

this for the double reason that it trains him toward obedience to God, and a life in heaven's order, and because it even gives him a better appetite, and a fuller fund of vigor for, his play itself. And so it is universally; no constraint is to be blamed as infringement on his happiness, or a harsh severity against his pleasures, when, in fact, all highest happiness and widest range of liberty depend on the requirement imposed.

There is no pretext of authority in the Scripture for making the Lord's day, or Sunday, a Jewish day to children. And those parents who make it a point of fidelity to lay it on their children, according to the strict police regulations of the Jewish code, would be much more orthodox, if they went farther back, and took up conceptions of the day some thousands of years older. When they assume that every thing which can be called play in a very young child is wrong, or an offense against religion, they try, in fact, to make Galatians of their children; incurring a much harsher, Christian rebuke, than if they only turned to the beggarly elements themselves, and laid their own souls under the bondage. What can a poor child do, that is cut off thus, for a whole twenty-four hours, from any right to vent his exuberant feeling—impounded, strictly, in the house and shut up to catechism; or taken to church, there to fold his hands and sit out the long solemnities of the worship, and what to him is the mysterious lingo of preaching; then taken home again to struggle with the pent up fires, waiting in dreary and forlorn vacancy, till what are called the mercies of the day are over? What conception does he get of religion, by such kind of treatment, but that it comes to the world as foe to every bright thing in it; a burden, a weariness, a tariff, on the other six days of life?

But there comes in, here, a grand scripture reason for some sort of restriction, viz.: that restriction is the necessary first stage of spiritual training every where. Instead of rushing into the conclusion, therefore, as many parents do, that all religious observances which create a feeling of restraint, or become at all irksome to children, are of course hurtful, and raise a prejudice in their minds against religion, the Scripture boldly asserts the fact that all law begins to be felt a bondage. Law and gospel have a natural relationship, and they are bound together every where, by a firm interior necessity. It is so in the family, in the school, and in religion. The law state is always felt to be a bondage, and the restriction is irksome. By-and-bye, the goodness of the law, and of them by whom it is administered, is fully discovered, and the obedience that began a restriction merges in liberty. The parents are obeyed with

such care, as anticipates even their wishes; the lesson, that was a task, is succeeded by that free application which sacrifices even health and life to the eagerness of study; and so the law of God, that was originally felt only in the friction, rubbed in by that friction, is finally melted into the heart by the cross of Jesus, and becomes the soul's liberty itself. It is no fault then of a Sunday that it is felt, in some proper degree, as a restriction; or even that the day is sometimes a little irksome to the extreme restiveness of children. All restraint, whether in the family or the school, is likely to be somewhat irksome at the first. The untamed will, the wild impulse of nature, always begins to feel even principle itself in that way of collision with it. Nor is it any fault of the Sunday observance, that it has, to us, the character of an institute. If it were a mere law of natural morality, we might observe it without any thought of God's will; but if we receive it as an institute, we acknowledge God's will in it; and nothing has a more wholesome effect on just this account, than the being trained to an habitual surrender to what God has confessedly enjoined or instituted by his will. It is the acknowledging of his pure authority, and is all the more beneficial, when the authority is felt in a somewhat restrictive way. The transition, too, is easy from this to a belief in the supernatural facts of Christianity. The conscience and life is already configured to such faith; for whatever is accepted as an institution of God, is accepted as the supernatural injunction of his will.

The flash of judgments, therefore, of many, in respect to the observance of Sunday, are not to be hastily accepted. We are not to read the prophet, as if promising that the streets of the city shall be full of boys and girls, on the Lord's holy day, playing in the streets thereof; or as if that kind of license were necessary to clear the irksomeness of an oppressive observance; or as if the power of religion were to be increased by removing every thing in it, which disturbs the natural impatience of restraint. Some child that was, for example, now grown up to be a man—a profligate it may be, a sworn infidel, a hater of all religion—laughs at the pious Sundays that his godly mother made him keep, and testifies to the bitter annoyance he suffered under the irksome and superstitious restrictions thus imposed on his childish liberty. Whereupon some liberalist or hasty and superficial disciple, immediately infers that all Sunday restrictions are injurious, and only raise a hostile feeling in the child toward all religion. Whereas it may be, in the example cited, for such are not very infrequent, that the child was never accustomed to restriction at any other time as he ought to have been,

or that his mother was too self-indulgent to exert herself in any such way for his religious entertainment, as to respite and soften the strictness of the Sunday observance. Perhaps the requirement was really too restrictive, or perhaps it was so little and so unevenly restrictive, as to make it only the more annoying. Be it as it may, in this or any particular example, a true Sunday observance needs to be restrictive in a certain degree, and needs to be felt in that way, in order to its real benefit. What is wanted is to have God's will felt in it, and then to have it reverently and willingly accepted. A Sunday turned into a holiday, to avoid the supposed evil of restrictiveness, would be destitute of religious value for just that reason.

The true principle of Sunday observance, then, appears to be this: that the child is to feel the day as a restriction, and is to have so much done to excite interest, and mitigate the severities of restriction, that he will also feel the true benignity of God in the day, and learn to have it as one of his enjoyments. When the child is very young, or just passing out of infancy, it will be enough that, with some simple teaching about God and his day, a part of his more noisy playthings are taken away; or, what is better than this, that he have a distinct Sunday set of playthings; such as may represent points of religious history, or associate religious ideas, abundance of which can be selected from any variety store without difficulty; then, as the child advances in age, so as to take the full meaning of language, or so as to be able to read, the playthings of the hands and eyes will be substituted by the playthings of the mind; which also will be such as connect some kind of religious interest—books and pictures relating to scripture subjects, a practice in the learning and beginning to sing Christian hymns, conversations about God and Christ, such as bring out the beauty of God's feeling and character, and present him, not so much as a frightful, but more as a friendly and attractive being; for the child who is only scared by God's terrors and severities, will very soon lose out all proportional conceptions of him, and will want to hear of him no more. Even the Sunday itself that only brings him to mind will, for just that reason, become a burden. The endeavor should be to excite a welcome interest in the day and the subjects it recalls. * * Under such a practice, religion, or faith, will be woven into the whole texture of the family life, and the house will become a truly Christian home. Nothing will be remembered so fondly, or steal upon the soul with such a gladsome, yet sacred, feeling afterward, as the recollection of these dear Sundays, when God's light shone so brightly into the house, and made a holiday for childhood so nearly divine.

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LORD BACON AND ARCHBISHOP WHATELY ON STUDIES.

BACON'S ESSAY L. OF STUDIES.

STUDIES serve for delight, for ornament, and for ability. Their chief use for delight is in privateness,[1] and retiring; for ornament, is in discourse; and for ability, is in the judgment and disposition of business; for, expert men can execute, and perhaps judge of particulars, one by one; but the general counsels, and the plots and marshaling of affairs, come best from those that are learned. To spend too much time in studies, is sloth; to use them too much for ornament, is affectation; to make[2] judgment wholly by their rules, is the humor of a scholar; they perfect nature, and are perfected by experience—for natural abilities are like natural plants, that need pruning by study; and studies themselves do give forth directions too much at large, except they be bounded in by experience. Crafty men contemn studies, simple men admire them, and wise men use them, for they teach not their own use; but that is a wisdom without them, and above them, won by observation. Read not to contradict and confute, nor to believe and take for granted, nor to find talk and discourse, but to weigh and consider. Some books are to be tasted, others to be swallowed, and some few to be chewed and digested; that is, some books are to be read only in parts; others to be read, but not curiously;[3] and some few to be read wholly, and with diligence and attention. Some books also may be read by deputy, and extracts made of them by others; but that would[4] be only in the less important arguments, and the meaner sort of books; else distilled books are, like common distilled waters, flashy things. Reading maketh a full man, conference a ready man, and writing an exact man; and, therefore, if a man write little, he had need have a great memory; if he confer little, he had need have a present wit; and if he read little, he had need have much cunning, to seem to know that[5] he doth not. Histories make men wise; poets, witty; the mathematics, subtle; natural philosophy, deep; moral, grave; logic and rhetoric, able to contend: 'Abeunt studia in mores'[6]—nay, there is no stond[7] or impediment in the wit, but may be wrought[8]

1 Privateness. *Privacy.* 2 Make. *Give.*

3 Curiously. *Attentively.* "At first I thought there had been no light reflected from the water. but observing it more *curiously*, I saw within it several spots which appeared darker than the rest."—*Sir Isaac Newton.*

4 Would. *Should.* 5 That. *What.*

6 "Manners are influenced by studies." 7 Stond. *Hindrances.*

8 Wrought. *Worked.* "Who, through faith, *wrought* righteousness."—*Heb.* xi 33.

"How great is Thy goodness, which Thou hast *wrought* for them that trust in Thee!"—*Psalm* xxxi. 19.

out by fit studies, like as diseases of the body may have appropriate exercises—bowling is good for the stone and reins,[1] shooting for the lungs and breast, gentle walking for the stomach, riding for the head, and the like; so, if a man's wits be wandering, let him study the mathematics, for in demonstrations, if his wit be called away never so little, he must begin again; if his wit be not apt to distinguish or find differences,[2] let him study the schoolmen, for they are 'cymini sectores;'[3] if he be not apt to beat over matters, and to call upon one thing to prove and illustrate another, let him study the lawyers' cases—so every defect of the mind may have a special receipt.

ANTITHETA ON STUDIES.

Pro.	Contra.
"Lectio est conversatio cum prudentibus; actio fere cum stultis."	"Quæ unquam ars docuit tempestivum artis usum?"
"*In reading, we hold converse with the wise; in the business of life, generally with the foolish.*"	"*What art has ever taught us the suitable use of an art?*"
"Non inutiles scientiæ existimandæ sunt, quarum in se nullus est usus, si ingenia acuant, et ordinent."	"Artis sæpissime ineptus usus est, ne sit nullus."
"*We should not consider even those sciences which have no actual practical application in themselves, as without value, if they sharpen and train the intellect.*"	"*A branch of knowledge is often put to an improper use, for fear of its being idle.*"

ANNOTATIONS BY ARCHBISHOP WHATELY.

"*Crafty men contemn studies.*"

This contempt, whether of crafty men or narrow-minded men, often finds its expression in the word "smattering;" and the couplet is become almost a proverb—

> "A little learning is a dangerous thing;
> Drink deep, or taste not the Pierian spring."

But the poet's remedies for the dangers of a little learning are both of them impossible. None can "drink deep" enough to be, in truth, anything more than very superficial; and every human being, that is not a downright idiot, must *taste*.

It is plainly impossible that any man should acquire a knowledge of all that is to be known, on *all* subjects. But is it then meant that, on each particular subject on which he does learn anything at all, he should be perfectly well informed? Here it may fairly be asked, what is the "well?"—how much knowledge is to be called "little" or "much?" For, in many departments, the very utmost that had been acquired by the greatest proficients, a century and a half back, falls short of what is familiar to many a boarding-school miss now. And it is likely that our posterity, a century and a half hence, will in many things be just as much

1 Reins. *Kidneys; inward parts.* "Whom I shall see for myself, though my *reins* be consumed within me."—*Job* xix. 27.

2 Differences. *Distinctions.*

3 "Splitters of cummin." Vid. *A. L.* I. vii 7.

in advance of us. And in most subjects, the utmost knowledge that any man can attain to, is but "a little learning" in comparison of what he remains ignorant of. The view resembles that of an American forest, in which, the more trees a man cuts down, the greater is the expanse of wood he sees around him.

But supposing you define the "much" and the "little" with reference to the existing state of knowledge in the present age and country, would any one seriously advise that those who are not proficients in astronomy should remain ignorant whether the earth moves or the sun?—that unless you are complete master of agriculture, as far as it is at present understood, there is no good in your knowing wheat from barley?—that unless you are such a Grecian as Porson, you had better not learn to construe the Greek Testament?

The other recommendation of the poet, "taste not"—that is to say, have no learning—is equally impossible. The truth is, every body has, and every body ought to have, a slight and superficial knowledge—a "smattering," if you will—of more subjects than it is possible for the most diligent student to acquire thoroughly. It is very possible, and also very useful, to have that slight smattering of chemistry which will enable one to distinguish from the salts used in medicine, the oxalic acid, with which, through mistake, several persons have been poisoned. Again, without being an eminent botanist, a person may know—what it is most important to know—the difference between cherries and the berries of the deadly nightshade; the want of which knowledge has cost many lives.

Again, there is no one, even of those who are not profound politicians, who is not aware that we have Rulers; and is it not proper that he should understand that government is necessary to preserve our lives and property? Is he likely to be a worse subject for knowing that? That depends very much on the kind of government you wish to establish. If you wish to establish an unjust and despotic government—or, if you wish to set up a false religion—then it would be advisable to avoid the danger of enlightening the people. But if you wish to maintain a good government, the more the people understand the advantages of such a government, the more they will respect it; and the more they know of true religion, the more they will value it.

There is nothing more general among uneducated people than a disposition to socialism, and yet nothing more injurious to their own welfare. An equalization of wages would be most injurious to themselves, for it would, at once, destroy all emulation. All motives for the acquisition of skill, and for superior industry, would be removed. Now, it is but a *little* knowledge of political economy that is needed for the removal of this error; but that little is highly useful.

Again, every one knows, no matter how ignorant of medicine, that there is such a thing as disease. But as an instance of the impossibility of the "taste not" recommendation of the poet, a fact may be mentioned, which perhaps is known to most. When the cholera broke out in Poland, the peasantry of that country took it into their heads that the nobles were poisoning them in order to clear the country of them; they believed the rich to be the authors of that terrible disease; and the consequence was that the peasantry rose in masses, broke into the houses of the nobility, and finding some chloride of lime, which had been used for the purpose of disinfecting, they took it for the poison which had caused the disease; and they murdered them. Now, that was the sort of "little learning" which was very dangerous.

Again we can not prevent people from believing that there is some superhuman

Being who has regard to human affairs. Some clowns in the Weald of Kent, who had been kept as much as possible on the "taste not" system,—left in a state of gross ignorance,—yet believed that the Deity did impart special powers to certain men; and that belief, coupled with excessive stupidity, led them to take an insane fanatic for a prophet. In this case, this "little learning" actually caused an insurrection in his favor, in order to make him king, priest and prophet of the British empire; and many lives were sacrificed before this insane insurrection was put down. If a "little learning" is a "dangerous thing," you will have to keep people in a perfect state of idiotcy in order to avoid that danger. I would, therefore, say that both the recommendations of the poet are impracticable.

The question arises, what are we to do? Simply to impress upon ourselves and upon all people the importance of laboring in that much neglected branch of human knowledge—the knowledge of our own ignorance;—and of remembering that it is by a confession of real ignorance that real knowledge must be gained. But even when that further knowledge is not attained, still even the knowledge of the ignorance is a great thing in itself; so great, it seems, as to constitute Socrates the wisest of his time.

Some of the chief sources of *unknown* ignorance may be worth noticing here. They are to be found in our not being aware: 1. How inadequate a medium language is for conveying thought. 2. How inadequate our very minds are for the comprehension of many things. 3. How little we need understand a word which may yet be familiar to us, and which we may use in reasoning. This piece of ignorance is closely connected with the two foregoing. (Hence, frequently, men will accept as an explanation of a phenomenon, a mere statement of the difficulty in other words.) 4. How utterly ignorant we are of efficient causes; and how the philosopher who refers to the law of gravitation the falling of a stone to the earth, no further explains the phenomenon than the peasant, who would say it is the nature of it. The philosopher knows that the stone obeys the *same* law to which all *other* bodies are subject, and to which, for convenience, he gives the name of gravitation. His knowledge is only more *general* than the peasant's; which, however, is a vast advantage. 5. How many words there are that express, not the nature of the thing they are applied to, but the manner in which they *affect us;* and which, therefore, give about as correct a notion of those things, as the word "crooked" would, if applied to a stick half immersed in water. (Such is the word *Chance*, with all its family.) 6. How many causes may, and usually do, conduce to the same effect. 7. How liable the faculties, even of the ablest, are to occasional failure; so that they shall overlook mistakes (and those often the most at variance with their own established notions) which, *when once exposed*, seem quite gross even to inferior men. 8. How much all are biassed, in all their moral reasonings, by self-love, or perhaps, rather, partially to *human nature*, and other passions. 9. Dugald Stewart would add very justly, How little we know of *matter;* no more indeed than of mind; though all are prone to attempt explaining the phenomena of mind by those of matter: for, what is *familiar* men generally consider as *well known*, though the fact is oftener otherwise.

The errors arising from these causes, and from not calculating on them,—that is, in short, from ignorance of our own ignorance, have probably impeded philosophy more than all other obstacles put together.

Certain it is, that only by this ignorance of our ignorance can "a little learning"

become "a dangerous thing." The dangers of knowledge are not to be compared with the dangers of ignorance. A man is more likely to miss his way in darkness than in *twilight:* in twilight than in full sun. And those contemners of studies who say (with Mandeville, in his *Treatise against Charity-schools*) "If a horse knew as much as a man, I should not like to be his rider," ought to add, "If a man knew as little as a horse, I should not like to trust him to ride." It is indeed possible to educate the children of the poor so as to disqualify them for an humble and laborious station in life; but this mistake does not so much consist in the *amount* of the knowledge imparted, as in the *kind* and the *manner* of education. Habits early engrafted on children, of regular attention,—of steady application to what they are about,—of prompt obedience to the directions they receive,—of cleanliness, order, and decent and modest behavior, can not but be of advantage to them in after life, whatever their station may be. And certainly, their familiar acquaintance with the precepts and example of Him who, when all stations of life were at his command, chose to be the reputed son of a poor mechanic, and to live with peasants and fishermen; or, again, of his apostle Paul, whose own hands "ministered to his necessities," and to those of his companions:—such studies, I say, can surely never tend to unfit any one for a life of humble and contented industry.

What, then, is the "smattering"—the imperfect and superficial knowledge—that really does deserve contempt? A slight and superficial knowledge is justly condemned, when it is put in the place of more full and exact knowledge. Such an acquaintance with chemistry and anatomy, *e. g.* as would be creditable, and not useless, to a lawyer, would be contemptible for a physician; and such an acquaintance with law as would be desirable for him, would be a most discreditable smattering for a lawyer.

It is to be observed that the word smattering is applied to two different kinds of scanty knowledge—the *rudimentary* and the *superficial;* though it seems the more strictly to belong to the latter. Now, as it is evident that no one can learn all things perfectly, it seems best for a man to make some pursuit his main object, according to, first, his *calling;* secondly, his *natural bent;* or thirdly, his *opportunities:* then, let him get a slight knowledge of what else is worth it, regulated in his choice by the same three circumstances; which should also determine, in great measure, where an elementary and where a superficial knowledge is desirable. Such as are of the most dignified and philosophical nature are most proper for elementary study; and such as we are the most likely to be called upon to practice for ourselves, the most proper for superficial; *e. g.*, it would be to most men of no practical use, and, consequently, not worth while, to learn by heart the meaning of some of the Chinese characters; but it might be very well worth while to study the principles on which that most singular language is constructed; *contra*, there is nothing very curious or interesting in the structure of the Portuguese language; but if one were going to travel in Portugal, it would be worth while to pick up some words and phrases. If both circumstances conspire, then, both kinds of information are to be sought for; and such things should be learned a little at *both ends;* that is, to understand the elementary and fundamental *principles*, and also to know some of the most remarkable *results*—a little of the rudiments, and a little of what is most called for in practice. *E. g.*, a man who has not made any of the physical or mathematical sciences his favorite pursuit, ought yet to know the principles of geometrical reasoning, and the elements of

mechanics; and also to know, by rote, something of the magnitude, distances, and motions of the heavenly bodies, though without having gone over the intermediate course of scientific demonstration.

Grammar, logic, rhetoric, and metaphysics, [or the philosophy of mind,] are manifestly studies of an *elementary* nature, being concerned about the instruments which we employ in effecting our purposes; and ethics, which is, in fact, a branch of metaphysics, may be called the elements of conduct. Such knowledge is far from showy. Elements do not much come into sight; they are like that part of a bridge which is under water, and is therefore least admired, though it is not the work of least art and difficulty. On this ground it is suitable to females, as least leading to that pedantry which learned ladies must ever be peculiarly liable to, as well as least exciting that jealousy to which they must ever be exposed, while learning in them continues to be a *distinction*. A woman might, in this way, be very learned without any one's finding it out.

"*Read not to contradict and confute, nor to believe and take for granted, nor to find talk and discourse, but to weigh and consider. Some books are to be tasted, others to be swallowed, and some few to be chewed and digested.*"

It would have been well if Bacon had added some hints as to the *mode* of study: *how* books are to be chewed, and swallowed, and digested. For, besides inattentive readers, who measure their proficiency by the pages they have gone over, it is quite possible, and not uncommon, to read most laboriously, even so as to get by heart the words of a book, without really *studying* it at all; that is, without employing the *thoughts* on the *subject*.

In particular, there is, in reference to Scripture,[1] "a habit cherished by some persons, of reading—assiduously, indeed—but without any attentive reflection and studious endeavor to ascertain the real sense of what they read—concluding that whatever impression is found to be left on the mind after a bare perusal of the words, must be what the sacred writers designed. They use, in short, little or none of that care which is employed on any other subject in which we are much interested, to read through each treatise consecutively as a whole,—to compare one passage with others that may throw light on it, and to consider what was the general drift of the author, and what were the occasions, and the persons he had in view.

"In fact, the real *students* of Scripture, properly so called, are, I fear, fewer than is commonly supposed. The theological student is often a student chiefly of some human system of divinity, fortified by *references* to Scripture, introduced from time to time as there is occasion. He proceeds—often unconsciously—by setting himself to ascertain, not what is the information or instruction to be derived from a certain narrative or discourse of one of the sacred writers, but what aid can be derived from them towards establishing or refuting this or that point of dogmatic theology. Such a mode of study surely ought at least not to be exclusively pursued. At any rate, it can not properly be called a *study of Scripture*.

"There is, in fact, a danger of its proving a great *hindrance* to the profitable study of Scripture; for so strong an association is apt to be established in the mind between certain expressions, and the *technical* sense to which they have been confined in some theological system, that when the student meets with them

1 See *Essays on the Difficulties of St. Paul's Epistles*. Essay X. page 233.

in Scripture, he at once understands them in that sense, in passages where perhaps an unbiassed examination of the context would plainly show that such was not the author's meaning. And such a student one may often find expressing the most unfeigned wonder at the blindness of those who can not find in Scripture such and such doctrines, which appear to him to be as clearly set forth there as words can express; which perhaps they are, on the (often gratuitous) *supposition* that those words are everywhere to be understood exactly in the sense which he has previously derived from some human system,—a system through which, as through a discolored medium, he views Scripture. But this is not to take Scripture for one's guide, but rather to make one's self *a guide* to Scripture.

"Others, again, there are, who are habitual readers of the Bible, and perhaps of little else, but who yet can not properly be said to *study* anything at all on the subject of religion, because, as was observed just above, they do not even attempt to exercise their mind on the subject, but trust to be sufficiently enlightened and guided by the mere act of perusal, while their minds remain in a passive state. And some, I believe, proceed thus on principle, considering that they are the better recipients of revealed truth the less they exercise their own reason.

"But this is to proceed on a totally mistaken view of the real province of reason. It would, indeed, be a great error to attempt *substituting* for revelation conjectures framed in our own mind, or to speculate on matters concerning which we have an imperfect knowledge imparted to us by revelation, and could have had, without it, none at all. But this would be, not to use, but to abuse, our rational faculties. By the use of our senses, which are as much the gift of the Creator as anything else we enjoy,—and by employing our reason on the objects around us, we can obtain a certain amount of valuable knowledge. And beyond this, there are certain other points of knowledge unattainable by these faculties, and which God has thought fit to impart to us by his inspired messengers. But *both* the volumes—that of Nature and that of Revelation—which He has thought good to lay before us, are to be carefully studied. On both of them we must diligently employ the faculties with which He, the Author of both, has endued us, if we would derive full benefit from his gifts.

"The telescope, we know, brings within the sphere of our own vision much that would be undiscernible by the naked eye; but we must not the less employ our eyes in making use of it; and we must watch and calculate the motions, and reason on the appearances, of the heavenly bodies, which are visible only through the telescope, with the same care we employ in respect of those seen by the naked eye.

"And an analogous procedure is requisite if we would derive the intended benefit from the pages of inspiration, which were designed not to save us the trouble of inquiring and reflecting, but to enable us, on some points, to inquire and reflect to better purpose,—not to supersede the use of our reason, but to supply its deficiencies."

Although, however, it is quite right, and most important, that the *thoughts* should be exercised on the subject of what you are reading, there is one mode of exercising the thoughts that is very hurtful; which is, that of *substituting conjectures* for attention to what the author says. *Preliminary* reflection on the subject is, as has been above said, very useful in many cases; though, by the way, it is unsafe as a preparation for the study of *Scripture;* and, in all studies, care should be taken to guard against allowing the judgment to be biased by

notions hastily and prematurely adopted. And again, *after* you have studied an author, it will be very advisable (supposing it is an uninspired and consequently fallible one) to reflect on what he says, and consider whether he is right, and how far.

But while *actually engaged* in perusal, attend to what the writer actually says, and endeavour fairly to arrive at *his* meaning, *before* you proceed to speculate upon it for yourself.

The study of a book, in short, should be conducted nearly according to the same rule that Bacon lays down for the study of nature. He warns philosophers, earnestly and often, against substituting for what he calls the "interrogatio naturæ," the "anticipatio naturæ;" that is, instead of attentive observation and experiment, forming conjectures as to what seems to us *likely*, or *fitting*, according to some hypothesis devised by ourselves. In like manner, in studying an author, you should *keep apart* interpretation and conjecture.

A good teacher warns a student of some book in a foreign language that he is learning, not to *guess* what the author is likely to have meant, and then twist the words into that sense, against the idiom of the language; but to be *led by* the words in the first instance; and then, if a difficulty as to the sense remains, to guess which of the possible meanings of the words is the most likely to be the right.

E. g. The words in the original of John xviii. 15, ὁ ἄλλος μαθητής, plainly signify "*the* other disciple;" and one of the commentators, perceiving that this is inconsistent with the opinion he had taken up, that this disciple was John himself, (since John had not been mentioned before, and the article, therefore, would make it refer to Judas, who alone had been just above named,) boldly suggests that the *reading must be wrong*, (though all the MSS. agree in it,) and that the article ought to be omitted, because it *spoils the sense;* that is, the sense which agrees with a *conjecture* adopted in defiance of the words of the passage.

This one instance may serve as a specimen of the way in which some, instead of interpreting an author, undertake to re-write what he has said.

The like rule holds good in other studies, quite as much as in that of a language. We should be ever on our guard against the tendency to read through *colored spectacles.*

Educational habits of thought, analogies, antecedent reasonings, feelings, and wishes, &c., will be always leading us to form some conjectural hypothesis, which is not necessarily hurtful, and may sometimes furnish a useful hint, but which must be most carefully watched, lest it produce an unfair bias, and lead you to strain into a conformity with it the words or the phenomena before you.

A man sets out with a conjecture as to what the Apostles are *likely* to have said, or *ought* to have said, in conformity with the the theological system he has learnt; or what the Most High may have done or designed; or what is or is not agreeable to the "analogy of faith," (see Campbell *on the Gospels;*) *i. e.*, of a piece with the christian system—namely, that which *he* has been taught, by fallible *men*, to regard as the christian system; and then he proceeds to examine Scripture, as he would examine with *leading questions* a witness whom he had summoned in his cause.

"As the fool thinketh,
So the bell chinketh."

Perhaps he "*prays through*" all the Bible; not with a candid and teachable

mind, seeking instruction, but unconsciously praying that he may *find himself in the right.* And he will seldom fail.

> "Hic liber est in quo quærit sua dogmata quisque;
> Invenit et pariter dogmata quisque sua."
>
> "In this book many students seek each one to find
> The doctrine or precept that's most to his mind:
> And each of them finds what they earnestly seek;
> For as the fool thinks, even so the bells speak."

It is the same with philosophy. If you have a strong wish to find phenomena such as to confirm the conjectures you have formed, and allow that wish to bias your examination, you are ill-fitted for interrogating nature. Both that, and *the other volume* of the records of what God does,—Revelation,—are to be interrogated, not as *witnesses*, but as *instructors.* You must let all your conjectures *hang loose* upon you; and be prepared to learn *from* what is written in each of those volumes, with the aid of the conjectures of reason; not *from* reason, (nor, by the by, from feelings and fancies, and wishes, and human authority,) with Scripture for your *aid.*

This latter procedure, which is a very common one with theological students, may be called making an *anagram* of Scripture,—taking it to pieces and reconstructing it in the model of some human system of "Institutes:" building a temple of one's own, consisting of the stones of the true one pulled down and put together in a new fashion.

Yet divines of this description are often considered by others as well as by themselves, pre-eminently scriptural, from their continual employment of the *very words* of Scripture, and their readiness in citing a profusion of texts. But, in reality, instead of using a human *commentary* on Scripture, they use Scripture itself as a kind of commentary on some human system. They make the *warp* human, and interweave an abundance of Scripture as a *woof;* which is just the reverse of the right procedure. But this may be called, truly, in a certain sense, "*taking* a text *from* Scripture," "preaching such and such a doctrine *out of* Scripture," and "*improving* Scripture."

Thus it is that men, when comparing their opinions with the standard of God's Word, suffer these opinions to *bend the rule* by which they are to be measured. But he who studies the Scriptures should remember that he is consulting the Spirit of Truth, and if he would hope for his aid, through whose enlightening and supporting grace alone those Scriptures can be read with advantage, he must search honestly and earnestly for the truth.

"*Read not to contradict and confute; nor to believe and take for granted.*"

With respect to the deference due to the opinions (written or spoken) of intelligent and well-informed men, it may be remarked, that *before* a question has been fully argued, there is a presumption that they are in the right; but *afterwards*, if objections have been brought which they have failed to answer, the presumption is the other way. The wiser, and the more learned, and the more numerous, are those opposed to you, and the more strenuous and persevering their opposition, the greater is the probability that if there were any flaw in your argument they would have refuted you. And therefore your adhering to an opposite opinion from theirs, so far from being a mark of arrogant contempt, is, in reality, the strongest proof of a high respect for them. For example—The

strongest confirmation of the fidelity of the translations of Scripture published by the Irish School Commissioners, is to be found in the many futile attempts, made by many able and learned men, to detect errors in them.

This important distinction is often overlooked.

"*Reading maketh a full man, conference a ready man, and writing an exact man.*"

Writing an Analysis, table of Contents, Index, or Notes to any book, is very important for the study, properly so called, of any subject. And so, also, is the practice of *previously* conversing or writing on the subject you are about to study.

I have elsewhere alluded to this kind of practice,[1] and suggested to the teacher "to put before his pupils, *previously* to their reading each lesson, some questions pertaining to the matter of it, requiring of them answers, oral or written, the best they can think of *without* consulting the book. Next, let them read the lesson, having other questions, such as may lead to any needful explanations, put before them as they proceed. And afterwards let them be examined (introducing numerous examples framed by themselves and by the teacher) as to the portion they have learned, in order to judge how far they remember it.

"Of the three kinds of questions,—which may be called, 1, *preliminary* questions; 2, questions of *instruction;* and 3, questions of *examination*,—the last alone are, by a considerable portion of instructors, commonly employed. And the elementary books commonly known as 'catechims,' or 'books in question and answer,' consist, in reality, of questions of this description.

"But the second kind—what is properly to be called instructive questioning—is employed by all who deserve to be reckoned good teachers.

"The first kind—the preliminary questioning—is employed (systematically and constantly) but by few. And, at first sight, it might be supposed by those who have not had experience of it, that it would be likely to increase the learner's difficulties. But if any well-qualified instructor will but carefully and judiciously try the experiment (in teaching any kind of science,) he will be surprised to find to how great a degree this exercise of the student's mind on the subject will contribute to his advancement. He will find that what has been taught in the mode above suggested, will have been learnt in a shorter time, will have been far the more thoroughly understood, and will be fixed incomparably the better in the memory."

Curiosity is as much the parent of attention, as attention is of memory; therefore the first business of a teacher—first, not only in point of time, but of importance—should be to excite, not merely a general curiosity on the subject of the study, but a particular curiosity on particular points in that subject. To teach one who has no curiosity to learn, is to sow a field without ploughing it.

And this process saves a student from being (as many are) intellectually damaged by having a very good memory. For an unskillful teacher is content to put before his pupils what they have to learn, and ascertaining that they remember it. And thus those of them whose memory is ready and attentive, have their mind left in a merely passive state, and are like a person always carried about in a sedan chair, till he has almost lost the use of his limbs. And then it is made a wonder that a person who has been so well taught, and who was so quick in

1 See Preface to *Easy Lessons on Reasoning*. Page v.

learning and remembering, should not prove an able man; which is about as reasonable as to expect that a capacious cistern, if filled, should be converted into a perennial fountain. Many are saved, by the deficiency of their memory, from being spoiled by their education; for those who have no extraordinary memory, are driven to supply its defects by *thinking*. If they do not remember a mathematical demonstration, they are driven to devise one. If they do not exactly retain what Aristotle or Smith have said, they are driven to consider what they were *likely* to have said, or ought to have said. And thus their faculties are invigorated by exercise.

Now, this kind of exercises a skillful teacher will afford to *all;* so that no one shall be spoiled by the goodness of his memory.

A very common practice may be here noticed, which should be avoided, if we would create a habit of studying with profit—that of making children *learn by rote* what they do not *understand*. "It is done on this plea—that they will hereafter learn the meaning of what they have been thus taught, and will be able to make a practical use of it."[1] But no attempt at economy of time can be more injudicious. Let any child whose capacity is so far matured as to enable him to comprehend an explanation,—*e. g.*, of the Lord's Prayer,—have it *then* put before him for the first time, and when he is made acquainted with the meaning of it, set to learn it by heart; and can any one doubt that, in less than a half a day's application, he would be able to repeat it fluently? And the same would be the case with other forms. All that is learned by rote by a child before he is competent to attach a meaning to the words he utters, would not, if all put together, amount to so much as would cost him, when able to understand it, a week's labor to learn perfectly. Whereas, it may cost the toil, often the vain toil, of many years, to unlearn the habit of *formalism*—of repeating words by rote without attending to their meaning; a habit which every one conversant with education knows to be in all subjects most readily acquired by children, and with difficulty avoided even with the utmost care of the teacher; but which such a plan must inevitably tend to generate. It is often said, and very truly, that it is important to form early habits of piety; but to train a child in one kind of habit, is not the most likely way of forming the opposite one; and nothing can be more contrary to true piety, than the Romish superstition (for such in fact it is) of attaching efficacy to the repetition of a certain form of words as a charm, independent of the understanding and of the heart.

"It is also said, with equal truth, that we ought to take advantage of the facility which children possess of learning; but to infer from thence, that Providence designs us to make such a use (or rather abuse) of this gift as we have been censuring, is as if we were to take advantage of the readiness with which a new-born babe swallows whatever is put into its mouth, to dose it with ardent spirits, instead of wholesome food and necessary medicine. The readiness with which children learn and remember words, is in truth a most important advantage if rightly employed; viz., if applied to the acquiring that mass of what may be called *arbitrary* knowledge of insulated facts, which *can only* be learned by rote, and which is necessary in after life; when the acquisition of it would both be more troublesome, and would encroach on time that might otherwise be better employed. Chronology, names of countries, weights and measures, and indeed all the *words* of any language, are of this description. If a child had even ten times the ordi-

1 *London Review*. No. xi., pages 412, 413.

nary degree of the faculty in question, a judicious teacher would find abundance of useful employment for it, without resorting to any that could possibly be detrimental to his future habits, moral, religious, or intellectual."

One very useful precept for students, is never to *remain long* puzzling out any difficulty; but lay the book and the subject aside, and return to it some hours after, or next day; after having turned the attention to something else. Sometimes a person will weary his mind for several hours in some efforts (which might have been spared) to make out some difficulty; and next day, when he returns to the subject, will find it quite easy.

The like takes place in the effort to recollect some *name*. You may fatigue yourself in vain for hours together; and if you turn to something else (which you might as well have done at once) the name will, as it were, flash across you without an effort.

There is something analogous to this, in reference to the scent of dogs. When a wounded bird, for instance, has been lost in the the thicket, and the dogs fail, after some search, to find it, a skillful sportsman always draws them off, and hunts them elsewhere for an hour, and then brings them back to the spot to try afresh; and they will often, then, find their game readily: though, if they had been hunting for it all the time, they would have failed.

It seems as if the dog—and the mind—having got into a kind of *wrong* track, continued in the same error, till drawn completely away elsewhere.

Always trust, therefore, for the overcoming of a difficulty, not to *long continued* study after you have once got bewildered, but to *repeated* trials, at intervals.

It may be here observed, that the student of any science or art should not only distinctly understand all the technical language, and all the rules of the art, but also learn them by heart, so that they may be remembered as familiarly as the alphabet, and employed *constantly* and with scrupulous exactness. Otherwise, technical language will prove an encumbrance instead of an advantage, just as a suit of clothes would be, if instead of putting them on and wearing them, one should carry them about in his hand.

"*There is no stond or impediment in the wit, but may be wrought out by fit studies.*"

It is a pity that Bacon did not more fully explain the mode in which different kinds of studies act on the mind. As an exercise of the reasoning faculty, pure mathematics is an admirable exercise, because it consists of *reasoning* alone, and does not encumber the student with any exercise of *judgment:* and it is well always to begin with learning one thing at a time, and to defer a combination of mental exercises to a later period. But then it is important to remember that mathematics does *not* exercise the *judgment;* and consequently, if too exclusively pursued, may leave the student very ill qualified for moral reasonings.

"The definitions, which are the principles of our reasoning, are very *few*, and the axioms still fewer; and both are, for the most part, *laid down* and *placed before the student in the outset;* the introduction of a new definition or axiom being of comparatively rare occurrence, at wide intervals, and with a *formal* statement, besides which, there is no room for *doubt* concerning either. On the other hand, in all reasonings which regard matters of fact, we introduce, almost at *every step*, fresh and fresh propositions (to a very great number) which had not been elicited in the course of our reasoning, but are taken for granted; viz., facts,

and laws of nature, which are here the principles of our reasoning, and *maxims*, or 'elements of belief,' which answer to the axioms in mathematics. If, at the opening of a treatise, for example, on chemistry, on agriculture, on political economy, &c., the author should make, as in mathematics, a formal statement of all the propositions he intended to assume as granted, throughout the whole work, both he and his readers would be astonished at the number; and, of these, many would be only probable, and there would be much room for doubt as to the *degree* of probability, and for judgment in ascertaining that degree.

"Moreover, mathematical axioms are always employed precisely *in the same simple form: e. g.*, the axiom that 'the things equal to the same are equal to one another,' is cited, whenever there is need, in those very words; whereas the maxims employed in the other class of subjects, admit of, and require, continual modifications in the application of them. *E. g.*, 'the stability of the laws of nature,' which is our constant assumption in inquiries relating to natural philosophy, appears in many different shapes, and in some of them does not possess the same complete certainty as in others; *e. g.*, when, from having always observed a certain sheep ruminating, we infer, that this individual sheep will continue to ruminate, we assume that 'the property which has hitherto belonged to this sheep will remain unchanged;' when we infer the same property of all sheep, we assume that 'the property which belongs to this individual belongs to the whole species;' if, on comparing sheep with some other kinds of horned animals,[1] and finding that all agree in ruminating, we infer that 'all horned animals ruminate,' we assume that 'the whole of a genus or class are likely to agree in any point wherein many species of that genus agree:' or in other words, 'that if one of two properties, &c., has *often* been found accompanied by another, and never without it, the former will be *universally* accompanied by the latter;' now all these are merely different forms of the maxim, that 'nature is uniform in her operations,' which, it is evident, varies in expression in almost every different case where it is applied, and the application of which admits of every degree of evidence, from perfect moral certainty, to mere conjecture.

"The same may be said of an infinite number of principles and maxims appropriated to, and employed in, each particular branch of study. Hence, all such reasonings are, in comparison of mathematics, very complex; requiring so much *more* than that does, beyond the process of merely deducing the conclusion logically from the premises: so that it is no wonder that the longest mathematical demonstration should be so much more easily constructed and understood than a much shorter train of just reasoning concerning real facts. The former has been aptly compared to a long and steep, but even and regular, flight of steps, which tries the breath, and the strength, and the perseverance only; while the latter resembles a short, but rugged and uneven, ascent up a precipice, which requires a quick eye, agile limbs, and a firm step; and in which we have to tread now on this side, now on that—ever considering, as we proceed, whether this or that projection will afford room for our foot, or whether some loose stone may not slide from under us. There are probably as many steps of pure reasoning in one of the longer of Euclid's demonstrations, as in the whole of an argumentative treatise on some other subject, occupying perhaps a considerable volume.

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1 Viz., having horns *on the skull*. What are called the horns of the rhinoceros are quite different in origin, and in structure, as well as in situation, from what are properly called horns.

"It may be observed here that mathematical reasoning, as it calls for no exercise of judgment respecting probabilities, is the best kind of introductory exercise; and from the same cause, is apt, when too exclusively pursued, to make men incorrect moral reasoners.

"As for those ethical and legal reasonings which were lately mentioned as in some respects resembling those of mathematics, (viz., such as keep clear of all assertions respecting facts,) they have this difference; that not only men are not so completely *agreed* respecting the maxims and principles of ethics and law, but the meaning also of each term can not be absolutely, and for ever, fixed by an arbitrary definition; on the contrary, a great part of our labor consists in distinguishing accurately the various senses in which men employ each term,—ascertaining which is the most proper,—and taking care to avoid confounding them together.

"It may be worth while to add in this place, that as a candid disposition,—a hearty desire to judge fairly, and to attain truth,—are evidently necessary with a view to give fair play to the reasoning powers, in subjects where we are liable to a bias from interest or feelings, so, a fallacious perversion of this maxim finds a place in the minds of some persons; who accordingly speak disparagingly of *all* exercise of the reasoning faculty in moral and religious subjects; declaiming on the insufficiency of *mere* intellectual power for the attainment of truth in such matters,—on the necessity of appealing to the heart rather than to the head, &c., and then leading their readers or themselves to the conclusion that the less we *reason* on such subjects the safer we are.

"But the proper office of candor is to *prepare* the mind not for the *rejection* of all evidence, but for the right *reception* of evidence;—not to be a *substitute* for reasons, but to enable us *fairly to weigh* the reasons on both sides. Such persons as I am alluding to are in fact saying that since just weights *alone*, without a just balance, will avail nothing, therefore we have only to take care of the scales, and let the weights take care of themselves.

"This kind of tone is of course most especially to be found in such writers as consider it expedient to inculcate on the mass of mankind what—there is reason to suspect—they do not themselves fully believe, and which they apprehend is the more likely to be rejected the more it is investigated."

A curious anecdote (which I had heard, in substance, some years before) was told me by the late Sir Alexander Johnstone. When he was acting as temporary governor of Ceylon, (soon after its cession,) he sat once as judge in a trial of a prisoner for a robbery and murder; and the evidence seemed to him so conclusive, that he was about to charge the jury (who were native Cingalese) to find a verdict of guilty. But one of the jury asked and obtained permission to examine the witnesses himself. He had them brought in one by one, and cross-examined them so ably as to elicit the fact that they were *themselves* the perpetrators of the crime, which they afterwards had conspired to impute to the prisoner. And they were accordingly put on their trial and convicted.

Sir A. J. was greatly struck by the intelligence displayed by this juror; the more, as he was only a small farmer, who was not known to have had any remarkable advantages of education. He sent for him, and after commending the wonderful sagacity he had shown, inquired eagerly what his studies had been. The man replied that he had never read but one book, the only one he possessed, which had long been in his family, and which he delighted to study in his leisure

hours. This book he was prevailed on to show to Sir A. J., who put it into the hands of one who knew the Cingalese language. It turned out to be a translation into that language of a large portion of Aristotle's *Organon*. It appears that the Portuguese, when they first settled in Ceylon and other parts of the East, translated into the native languages several of the works then studied in the European Universities; among which were the Latin versions of Aristotle.

The Cingalese in question said that if his understanding had been in any degree cultivated and improved, it was to that book he owed it.

It is very important to warn all readers of the influence likely to be exercised in the formation of their opinions, *indirectly*, and by works not professedly argumentative, such as Poems and Tales. Fletcher of Saltoun said, he would let any one have the making of the laws of a country, if he might have the making of their ballads.

An observation in the *Lectures on Political Economy* on one cause which has contributed to foster an erroneous opinion of the superior moral purity of poor and half-civilized countries, is equally applicable to a multitude of other cases, on various subjects. "One powerful, but little suspected cause, I take to be, an early familiarity with poetical descriptions of pure, unsophisticated, rustic life, in remote, sequestered, and unenlightened districts;—of the manly virtue and practical wisdom of our simple forefathers, before the refinements of luxury had been introduced;—of the adventurous wildness, so stimulating to the imagination, of savage or pastoral life, in the midst of primæval forests, lofty mountains, and all the grand scenery of uncultivated nature. Such subjects and scenes are much better adapted for poets, than thronged cities, workshops, coalpits, and iron-foundries. And poets, whose object is to please, of course keep out of sight all the odious or disgusting circumstances pertaining to the life of the savage or the untutored clown, and dwell exclusively on all the amiable and admirable parts of that simplicity of character which they feign or fancy. Early associations are thus formed, whose influence is often the stronger and the more lasting, from the very circumstance that they are formed *unconsciously*, and do not come in the form of propositions demanding a deliberate assent. Poetry does not profess to aim at conviction; but it often leaves impressions which affect the reasoning and the judgment. And a false impression is perhaps oftener conveyed in other ways than by sophistical argument; because *that* rouses the mind to exert its powers, and to assume, as it were, a reasoning mood."[1]

The influence exercised by such works is overlooked by those who suppose that a child's character, moral and intellectual, is formed by those books only which are put into his hands with that *design*. As hardly anything can accidentally touch the soft clay without stamping its mark on it, so, hardly any reading can interest a child without contributing in some degree, though the book itself be afterwards totally forgotten, to form the character; and the parents, therefore, who, merely requiring from him a certain course of *study*, pay little or no attention to story-books, are educating him they know not how.

And here, I would observe that in books designed for children there are two extremes that should be avoided. The one, that reference to religious principles

1 In an article in a Review I have seen mention made of a person who discovered the falsity of a certain doctrine (which, by the way, is nevertheless a true one, that of Malthus,) *instinctively*. This kind of instinct, *i. e.* the habit of forming opinions at the suggestion rather of feeling than of reason, is very common.

in connection with matters too trifling and undignified, arising from a well-intentioned zeal, causing a forgetfulness of the maxim whose notorious truth has made it proverbial, "Too much familiarity breeds contempt." And the other is the contrary, and still more prevailing extreme, arising from a desire to preserve a due *reverence* for religion, at the expense of its useful application in conduct. But a line may be drawn which will keep clear of both extremes. We should not exclude the association of things sacred with whatever are to *ourselves* trifling matters, (for "these little things are great" to children,) but, with whatever is viewed by *them* as trifling. Every thing is great or small in reference to the parties concerned. The private concerns of any obscure individual are very insignificant to the world at large, but they are of great importance to himself. And all worldly affairs must be small in the sight of the Most High; but irreverent familiarity is engendered in the mind of any one, then, and then only, when things sacred are associated with such as are, to him, insignificant things.

And here I would add that those works of fiction are worse than unprofitable that inculcate morality, with an exclusion of all reference to religious principle. This is obviously and notoriously the character of Miss Edgeworth's moral tales. And so entire and resolute is this exclusion, that it is maintained at the expense of what may be called poetical truth; it destroys, in many instances, the probability of the tale, and the naturalness of the characters. That Christianity *does* exist, every one must believe as an incontrovertible truth; nor can any one deny that, whether true or false, it does exercise,—at least is supposed to exercise,—an influence on the feelings and conduct of some of the believers in it. To represent, therefore, persons of various ages, sex, country, and station in life, as practicing, on the most trying occasions, every kind of duty, and encountering every kind of danger, difficulty, and hardship, while none of them ever makes the least reference to a religious motive, is as decidedly at variance with reality,—what is called in works of fiction *unnatural*,—as it would be to represent Mahomet's enthusiastic followers as rushing into battle without any thought of his promised paradise. This, therefore, is a blemish *in point of art*, which every reader possessing taste must perceive, whatever may be his religious or non-religious persuasion. But a far higher, and more important, question than that of taste is involved. For though Miss Edgeworth may entertain opinions which would not permit her, with consistency, to attribute more to the influence of religion than she has done, and in that case may stand acquitted, *in foro conscientiæ*, of willfully suppressing anything which she acknowledges to be true and important; yet, as, a writer, it must still be considered as a great blemish, in the eyes at least of those who think differently, that virtue should be studiously inculcated, with scarcely any reference to what they regard as the mainspring of it,—that vice should be traced to every other source except the want of religious principle,—that the most radical change from worthlessness to excellence should be represented as wholly independent of that Agent which they consider as the only one that can accomplish it,—and that consolation under affliction should be represented as derived from every source, except the one which they look to as the only true and sure one. "Is it not because there is no God in Israel, that ye have sent to inquire of Baalzebub, the God of Ekron?" This vital defect in such works should be constantly pointed out to the young reader; and he should be warned that, to realize the picture of noble, disinterested, thorough-going virtue, presented in such and such an instance, it is absolutely necessary to resort to those

principles which in these fictions are unnoticed. He should, in short, be reminded that all these "things that are lovely and of good report," which have been placed before him, are the genuine fruits of the Holy Land; though the spies who have brought them bring also an evil report of that land, and would persuade us to remain wandering in the wilderness.

The student of history, also, should be on his guard against the indirect influence likely to be exercised on his opinions. On this point I take the liberty of quoting a passage from my *Lectures on Political Economy*:—

"An injudicious reader of history is liable to be misled by the circumstance, that historians and travelers occupy themselves principally (as is natural) with the relation of whatever is *remarkable*, and different from what commonly takes place in their own time or country. They do not dwell on the ordinary transactions of human life, (which are precisely what furnish the data on which political economy proceeds,) but on every thing that appears an exception to general rules, and in any way such as could not have been anticipated. The sort of information which the political economist wants is introduced, for the most part, only incidentally and obliquely; and is to be collected, imperfectly, from scattered allusions. So that if you will give a rapid glance, for instance, at the history of these islands, from the time of the Norman conquest to the present day, you will find that the differences between the two states of the country, in most of the points with which our science is conversant, are but very imperfectly accounted for in the main outline of the narrative.

"If it were possible that we could have a full report of the common business and common conversation, in the markets, the shops, and the wharfs of Athens and Piræus, for a single day, it would probable throw more light on the state of things in Greece at that time, in all that political economy is most concerned with, than all the histories that are extant put together.

"There is a danger, therefore, that the mind of the student, who proceeds in the manner I have described, may have been even drawn off from the class of facts which are, for the purpose in question, most important to be attended to.

"For, it should be observed that in all studies there is a danger to be guarded against, which Bacon, with his usual acuteness, has pointed out: that most men are so anxious to make or seek for some application of what they have been learning, as not unfrequently to apply it improperly, by endeavoring, lest their knowledge should lie by them idle, to bring it to bear on some question to which it is irrelevant; like Horace's painter, who, being skillful in drawing a cypress, was for introducing one into the picture of a shipwreck. Bacon complains of this tendency among the logicians and metaphysicians of his day, who introduced an absurd and pernicious application of the studies in which they had been conversant, into natural philosophy: 'Artis sæpe ineptus fit usus, *ne sit nullus*.' But the same danger besets those conversant in every other study likewise, (political economy of course not excepted,) that may from time to time have occupied a large share of each man's attention. He is tempted to seek for a solution of every question on every subject, by a reference to his own favorite science or branch of knowledge; like a schoolboy when first intrusted with a knife, who is for trying its edge on every thing that comes in his way.

"Now in reference to the point immediately before us, he who is well read in history and in travels should be warned of the danger (the more on account of the real high importance of such knowledge) of misapplying it,—of supposing

that because political economy is conversant with *human transactions*, and he is acquainted with so much greater an amount of *human transactions* than the generality of men, he must have an advantage over them in precisely the same degree, in discussing questions of political economy. Undoubtedly he *has* a great advantage, if he is careful to keep in view the true principles of the science; but otherwise he may even labor under a *dis*-advantage, by forgetting that (as I just now observed) the kind of transactions which are made most prominent and occupy the chief space, in the works of historians and travelers, are usually not those of every-day life, with which political economy is conversant. It is in the same way that an accurate *military survey* of any district, or a series of sketches accompanying a *picturesque* tour through it, may even serve to mislead one who is seeking for a knowledge of its *agricultural* condition, if he does not keep in mind the different objects which different kinds of survey have in view.

"Geologists, when commissioning their friends to procure them from any foreign country such specimens as may convey an idea of its geological character, are accustomed to warn them against sending over collections of *curiosities—i. e.* specimens of spars, stalactites, &c., which are accounted, in that country, curious, from being *rarities*, and which consequently convey no correct notion of its general features. What they want is, specimens of the *commonest* strata,—the stones with which the roads are mended, and the houses built, &c. And some fragments of these, which in that country are accounted mere rubbish, they sometimes, with much satisfaction, find *casually adhering* to the specimens sent them as curiosities, and constituting, for their object, the most important part of the collection. Histories are in general, to the political economist, what such collections are to the geologist. The casual allusions to common, and what are considered insignificant matters, conveying to him the most valuable information.

"An injudicious study of history, then, may even prove a hindrance instead of a help to the forming of right views of political economy. For not only are many of the transactions which are, in the historian's view, the most important, such as are the least important to the political economist, but also a great proportion of them consists of what are in reality the greatest *impediments* to the progress of a society in wealth: viz., wars, revolutions, and disturbances of every kind. It is not in consequence of these, but in spite of them, that society has made the progress which in fact it has made. So that in taking such a survey as history furnishes of the course of events, for instance, for the last eight hundred years, (the period I just now alluded to,) not only do we find little mention of the causes which have so greatly increased national wealth during that period, but what we chiefly do read of is, the *counteracting* causes; especially the wars which have been raging from time to time, to the destruction of capital, and the hindrance of improvement. Now, if a ship had performed a voyage of eight hundred leagues, and the register of it contained an account chiefly of the contrary winds and currents, and made little mention of favorable gales, we might well be at a loss to understand how she reached her destination; and might even be led into the mistake of supposing that the contrary winds had forwarded her in her course. Yet such is history!"

In reference to the study of history, I have elsewhere remarked upon the importance, among the intellectual qualifications for such a study, of a vivid imagination,—a faculty which, consequently, a skillful narrator must himself possess, and to which he must be able to furnish excitement in others. Some may, per-

haps, be startled at this remark, who have been accustomed to consider imagination as having no other office than to *feign* and to falsify. Every faculty is liable to abuse and misdirection, and imagination among the rest; but it is a mistake to suppose that it necessarily tends to pervert the truth of history, and to mislead the judgment. On the contrary, our view of any transaction, especially one that is remote in time or place, will necessarily be imperfect, generally incorrect, unless it embrace something more than the bare outline of the occurrences,—unless we have before the mind a lively idea of the scenes in which the events took place, the habits of thought and of feeling of the actors, and all the circumstances connected with the transaction; unless, in short, we can in a considerable degree transport ourselves out of our own age, and country, and persons, and imagine ourselves the agents or spectators. It is from consideration of all these circumstances that we are enabled to form a right judgment as to the facts which history records, and to derive instruction from it. What we imagine may indeed be merely *imaginary*, that is, unreal; but it may again be what actually does or did exist. To say that imagination, if not regulated by sound judgment and sufficient knowledge, may chance to convey to us false impressions of past events, is only to say that man is fallible. But such false impressions are even *much the more* likely to take possession of those whose imagination is feeble or uncultivated. They are apt to imagine the things, persons, times, countries, &c., which they read of, as much less different from what they see around them than is really the case.

The practical importance of such an exercise of imagination to a full, and clear, and consequently profitable view of the transactions related in history, can hardly be over-estimated. In respect of the very earliest of all human transactions, it is matter of common remark how prone many are to regard with mingled wonder, contempt, and indignation, the transgression of our first parents; as if they were not a fair sample of the human race; as if any of us would not, if he had been placed in precisely the same circumstances, have acted as they did. The Corinthians, probably, had perused with the same barren wonder the history of the backslidings of the Israelites; and needed that Paul should remind them, that these things were written for their example and admonition. And all, in almost every portion of history they read, have need of a corresponding warning, to endeavor to fancy themselves the persons they read of, that they may recognize in the accounts of past times the portraiture of our own. From not putting ourselves in the place of the persons living in past times, and entering fully into all their feelings, we are apt to forget how probable many things might appear, which we know did not take place; and to regard as perfectly chimerical, expectations which we know were not realized, but which, had we lived in those times, we should doubtless have entertained; and to imagine that there was no *danger* of those evils which, were, in fact, escaped. We are apt also to make too little allowances for prejudices and associations of ideas, which no longer exist precisely in the same form among ourselves, but which, perhaps, are not more at variance with right reason than others with which ourselves are infected.

"*Studies serve for delight, for ornament, and for ability.*"

We should, then, cultivate, not only the cornfields of our minds, but the pleasure-grounds also. Every faculty and every study, however worthless they may be, when not employed in the service of God,—however debased and pol-

luted when devoted to the service of sin,—become ennobled and sanctified when directed, by one whose constraining motive is the love of Christ, towards a good object. Let not the Christian, then, think "scorn of the pleasant land." That land is the field of ancient and modern literature—of philosophy, in almost all its departments—of the arts of reasoning and persuasion. Every part of it may be cultivated with advantage, as the Land of Canaan when bestowed upon God's peculiar people. They were not commanded to let it lie waste, as incurably polluted by the abominations of its first inhabitants; but to cultivate it, and dwell in it, living in obedience to the divine laws, and dedicating its choicest fruits to the Lord their God.

IX. SCHOOLS AS THEY WERE SIXTY YEARS AGO.

To understand the real progress which has been made in the organization, administration, and instruction of institutions of learning in this country, and at the same time to appreciate the importance of many agencies and means of popular education besides schools, books, and teachers, we must, as far as we can, look into the schools themselves, as they were fifty and sixty years ago, and realize the difficulties and deficiences under which some of the noblest characters of our history were developed. As a contribution to our knowledge of these difficulties and deficiences in our schools, we bring together the testimony of several eminent men who were pupils or teachers in these schools, and who assisted in various ways in achieving their improvement.

LETTER FROM NOAH WEBSTER, LL. D.

NEW HAVEN, March 10th, 1840.

MR. BARNARD: *Dear Sir*—You desire me to give you some information as to the mode of instruction in common schools when I was young, or before the Revolution. I believe you to be better acquainted with the methods of managing common schools, at the present time, than I am; and I am not able to institute a very exact comparison between the old modes and the present. From what I know of the present schools in the country, I believe the principal difference between the schools of former times and at present consists in the books and instruments used in the modern schools.

When I was young, the books used were chiefly or wholly Dilworth's Spelling Books, the Psalter, Testament, and Bible. No geography was studied before the publication of Dr. Morse's small books on that subject, about the year 1786 or 1787. No history was read, as far as my knowledge extends, for there was no abridged history of the United States. Except the books above mentioned, no book for reading was used before the publication of the Third Part of my Institute, in 1785. In some of the early editions of that book, I introduced short notices of the geography and history of the United States, and these led to more enlarged descriptions of the country. In 1788, at the request of Dr. Morse, I wrote an account of the transactions in the United States, after the Revolution; which account fills nearly twenty pages in the first volume of his octavo editions.

Before the Revolution, and for some years after, no slates were used in common schools: all writing and the operations in arithmetic were on paper. The teacher wrote the copies and gave the sums in arithmetic; few or none of the

pupils having any books as a guide. Such was the condition of the schools in which I received my early education.

The introduction of my Spelling Book, first published in 1783, produced a great change in the department of spelling; and, from the information I can gain, spelling was taught with more care and accuracy for twenty years or more after that period, than it has been since the introduction of multiplied books and studies.*

No English grammar was generally taught in common schools when I was young, except that in Dilworth, and that to no good purpose. In short, the instruction in schools was very imperfect, in every branch; and if I am not misinformed, it is so to this day, in many branches. Indeed there is danger of running from one extreme to another, and instead of having too few books in our schools, we shall have too many.

I am, sir, with much respect, your friend and obedient servant,

N. WEBSTER.

Dr. Webster in an essay published in a New York paper in 1788, "On the Education of Youth in America," and in another essay published in Hartford, Ct., in 1790, "On Property, Government, Education, Religion, Agriculture, etc., in the United States,"† while setting forth some of the cardinal doctrines of American education as now held, throws light on the condition of schools and colleges in different parts of the country at that date.

The first error that I would mention is a too general attention to the dead languages, with a neglect of our own. * * * This neglect is so general that there is scarcely an institution to be found in the country where the English tongue is taught regularly from its elements to its pure and regular construction in prose and verse. Perhaps in most schools boys are taught the definition of the parts of speech, and a few hard names which they do not understand, and which the teacher seldom attempts to explain: this is called learning grammar. * * * The principles of any science afford pleasure to the student who comprehends them. In order to render the study of language agreeable, the distinctions between words should be illustrated by the difference in visible objects. Examples should be presented to the senses which are the inlets of all our knowledge.

Another error which is frequent in America, is that a master undertakes to teach many different branches in the same school. In new settlements, where the people are poor, and live in scattered situations, the practice is often unavoidable. But in populous towns it must be considered as a defective plan of education. For suppose the teacher to be equally master of all the branches which he attempts to teach, which seldom happens, yet his attention must be distracted with a multiplicity of objects, and consequently painful to himself, and not useful to to his pupils. Add to this the continual interruptions which

* The general use of my Spelling Book in the United States has had a most extensive effect in correcting the pronunciation of words, and giving uniformity to the language. Of this change, the present generation can have a very imperfect idea.

† These essays were afterwards collected with others in a volume entitled "A Collection of Essays and Fugitive Writings, etc." By Noah Webster, Jr. Boston: 1790.

the students of one branch suffer from those of another, which must retard the progress of the whole school. It is a much more eligible plan to appropriate an apartment to each branch of education, with a teacher who makes that branch his sole employment. * * * Indeed what is now called a liberal education disqualifies a man for business. Habits are formed in youth and by practice; and as business is in some measure mechanical, every person should be exercised in his employment in an early period of life, that his habits may be formed by the time his apprenticeship expires. An education in a university interferes with the forming of these habits, and perhaps forms opposite habits; the mind may contract a fondness for ease, for pleasure, or for books, which no efforts can overcome. An academic education, which should furnish the youth with some ideas of men and things, and leave time for an apprenticeship before the age of twenty-one years, would be the most eligible for young men who are designed for active employments.

* * * * * *

But the principal defect in our plan of education in America is the want of good teachers in the academies and common schools. By good teachers I mean men of unblemished reputation, and possessed of abilities competent to their station. That a man should be master of what he undertakes to teach is a point that will not be disputed; and yet it is certain that abilities are often dispensed with, either through inattention or fear of expense. To those who employ ignorant men to instruct their children, let me say, it is better for youth to have no education than to have a bad one; for it is more difficult to eradicate habits than to impress new ideas. The tender shrub is easily bent to any figure; but the tree which has acquired its full growth resists all impressions. Yet abilities are not the sole requisites. The instructors of youth ought, of all men, to be the most prudent, accomplished, agreeable, and respectable. What avail a man's parts, if, while he is "the wisest and brightest," he is the "meanest of mankind?" The pernicious effects of bad example on the minds of youth will probably be acknowledged; but, with a view to improvement, it is indispensably necessary that the teachers should possess good breeding and agreeable manners. In order to give full effect to instructions it is requisite that they should proceed from a man who is loved and respected. But a low-bred clown or morose tyrant can command neither love nor respect; and that pupil who has no motive for application to books but the fear of the rod, will not make a scholar.

LETTER FROM REV. HEMAN HUMPHREY, D. D.

PITTSFIELD, December 12th, 1860.

HON. HENRY BARNARD: *Dear Sir*—I am glad to hear from you, still engaged in the educational cause, and that you are intending to "give a picturesque survey of the progress of our common schools, their equipment, studies, and character." If my early recollections and experience will give you any little aid, I shall esteem myself happy in affording it.

The first school I remember was kept a few weeks by a maiden lady, called Miss Faithy, in a barn. I was very young, as were most of the children. What I learned then, if any thing, I have forgotten. This was in the summer, of course. The next was a school, so called, kept a month or two by a neighbor of ours, who was the best *trout fisher*, with his horse-hair line, in all those parts. He wrote a fair hand, as I remember, on birch bark. What he taught

us, but to say *tue* and *due*, has escaped my recollection. We had no school-house then in our district, and we met as much for play as any thing, where we could find shelter. The next winter, another neighbor took us a few weeks into one of the rooms of his own house, where every thing but learning was going on. His speech bewrayed him of Rhode Island origin, and whatever he knew, he certainly could never have had much if any chance of being whipped in school when he was a boy. I remember his tremendous *stamp* when we got noisy in school-time, and that is all. This, however, is not a fair sample of school accommodations in my boyhood; and I had a better chance for two or three winters afterward.

School-houses.

Most of the other districts in the town had school-houses, but not all. The first winter that I kept school myself, was in a room next to the kitchen in a small private house. Some of the school-houses were better than others; but none of them in that or the adjoining towns were convenient or even comfortable. They were rather *juvenile penitentiaries*, than attractive accommodations for study. They were too small, and low from the ceiling to the floor, and the calculation of the builders seemed to have been, to decide into how small a space the children could be crowded, from the fireplace till the room was well packed. Not unfrequently sixty or seventy scholars were daily shut up six hours, where there was hardly room for thirty. The school-houses were square, with a very narrow entry, and a large fireplace on the side near the door. There were no stoves then. They were generally roughly clapboarded, but never painted. They had writing-desks, or rather, long boards for writing, on two or three sides, next to the wall. The benches were all loose; some of them boards, with slabs from the saw-mill, standing on four legs, two at each end. Some were a little lower than the rest, but many of the smaller children had to sit all day with their legs dangling between the bench and the floor. Poor little things! nodding and trying to keep their balance on the slabs, without any backs to lean against, how I pity them to this day. In the coldest weather, it was hard to tell which was the most difficult, to keep from roasting or freezing. For those nearest to the fire it was sweltering hot, while the ink was freezing in the pens on the back side of the room. "*Master*, I am too hot"—"Master, may I go to the fire?" That was the style of address in those days, and we did our best to be *masters*, anyhow.

All the school-houses that I remember stood close by the traveled road, without any play-grounds or inclosures whatever. If there were any shade trees planted, or left of spontaneous growth, I have forgotten them. And in most cases, there were no outside accommodations, even the most necessary for a moment's occasion. I now marvel at it, but so it was. In that respect, certainly, the days of the children are better than the days of their fathers were.

For the most part, the winter schools were miserably supplied with wood. I kept school myself in three towns, and in but one of the schools was there any wood-shed whatever; and no wood was got up and seasoned in summer against winter. Most of what we used was standing in the forests when the school began, and was cut and brought sled length by the farmers in proportion to the number of scholars which they sent. Not exactly that, either; for sometimes, when we went to the school-house in a cold morning, there was *no wood* there. Somebody had neglected to bring his load, and we were obliged to adjourn over

to the next day. In many cases, the understanding was, that the larger boys must cut the wood as it was wanted. It always lay in the snow, and sometimes the boys were sent to dig it out in school-time, and bring it in, all wet and green as it was, to keep us from freezing. That was the fuel to make fires with in the morning, when the thermometer was below zero, and how the little children cried with the cold, when they came almost frozen, and found no fire burning; nothing but one or two boys blowing and keeping themselves warm as well as they could, by exercise, in trying to kindle it. Such were our schoolhouses and their disaccommodations.

Branches Taught.

They were reading, spelling, and writing, besides the A B C's to children scarcely four years old, who ought to have been at home with their mothers. They were called up twice a day by the master pointing with his penknife, "What's that?" "A." "What's that?" "D." "No, it's B." "What's that?" "N." "No, you careless boy, it's C;" and so down to *ezand*. "Go to your seat; you will never learn your lesson in the world, at this rate." Our schoolbooks were the Bible, "Webster's Spelling Book," and "Third Part," mainly. One or two others were found in some schools for the reading classes. Grammar was hardly taught at all in any of them, and that little was confined almost entirely to committing and reciting the rules. Parsing was one of the occult sciences in my day. We had some few lessons in geography, by questions and answers, but no maps, no globes; and as for *blackboards*, such a thing was never thought of till long after. Children's reading and picture-books, we had none; the fables in Webster's Spelling Book came nearest to it. Arithmetic was hardly taught at all in the day schools. As a substitute, there were some evening schools in most of the districts. Spelling was one of the leading daily exercises in all the classes, and it was better, a good deal, I think, than it is now.

The winter schools were commonly kept about three months; in some favored districts *four*, but rarely as long. As none of what are now called the higher branches were taught beyond the merest elements, parents generally thought that three or four months was enough. There were no winter *select* schools for the young above the age of sixteen or seventeen, as I remember, till after I retired from the profession, such as it then was. There may have been here and there an academy, in some parts of the State; but not one within the range of my acquaintance.

Spring Exhibitions.

At the close of the winter schools we had what we used to call our *Quarter-days*, when the schools came together in the meeting-house, with a large congregation of parents and friends. The public exercises were reading, spelling, and speaking single pieces and dialogues. Some of the dialogues we wrote ourselves, for our own schools. Most of them were certainly very flat; but they brought down the house, and answered the purpose as well as any we could pick up. We thought then, as I think now, that those quarter-days were of great advantage to the schools. The anticipation of them kept up an interest all winter, and stimulated both teachers and scholars to do their best in the way of preparation. As the time approached, we had evening schools for reading and rehearsing the dialogues, so as to be sure not to fall behind in the ex-

hibitions. None of our college commencements are now looked forward to with greater interest than were those vernal anniversaries.

Another thing that helped us a good deal was the occasional afternoon visits of the parents and other friends of the schools. They came in by invitation, or whenever they chose, and their visits always did us good.

Still another practice we found to be quite stimulating and useful. We had a mutual understanding that, without giving any notice, any teacher might dismiss his own school for an afternoon, and, taking along with him some of the older boys, call in to see how his brother teacher got along in the next or some other district. The arrangement worked well. We made speeches, complimented one another as politely as circumstances would allow, and went home resolved not to fall behind the best of them.

In the school, we made up our minds to be masters, in *fact* as well as in name. Though of late years I have not had very good advantages for making the comparison, I believe the schools were quite as well governed sixty years ago as they are now. Among other things which we did to maintain our authority, was to go out now and then and have a snowball skirmish with the boys, and though we commonly got beat, nothing we could do was more effectual.

Corporal punishments, I believe, were sparingly resorted to in most of our schools. Though I myself believed in Solomon fully, I never flogged but one scholar in my life, though I shook the mischief out of a great many. I think Sam was of the opinion, in the premises, that the rod was laid on rather smartly, for I understood he promised, some day, to pay me in kind, which, however, I suppose he never found it quite convenient to undertake.

We schoolmasters within convenient distances used to meet in the winter evenings for mutual improvement, which, to own the truth, we needed a good deal. Our regular exercises were reading for criticisms, reporting how we were getting along, and conversing upon the best method of managing our schools. This was very profitable, as we thought, to us all.

In those ancient times, it was an almost universal custom in the rural towns of Connecticut, for the teachers to *board round*, and upon the whole I liked it. It was a good school for us. By going into all the families we learned a great deal. We were looked upon as having more in our heads than we could fairly claim, and they always kept us on the best they had. It is true, the cooking was not always the best, nor sheets always so clean as to guard against infection; and if, perchance, it sometimes broke out, we knew how to cure it.

Our wages were generally screwed down to the lowest notch by the school committees, under the instruction of the districts. For my first campaign I received *seven* dollars a month and board; for the next, *nine;* for the third, *ten;* and I think I never went above thirteen till quite the last of my teaching before I went to college. As I had some reputation in that line, I suppose I was as well paid as my brethren.

With regard to the summer schools of that period, I have very little to say. They were kept by females upon very low wages, about as much a week as they could earn in families by spinning or weaving. They took good care of the little children, and taught them as well as they could.

As we had no grammar schools in which the languages were taught, we most

of us fitted for college with our ministers, who, though not very fresh from their classics, did what they could to help us.

Finally, you ask me whether there were any schools for young ladies in those old times? There may possibly have been in two or three of the largest towns, but the only one of which I had any knowledge was in Litchfield, kept by Miss Pierce, and I am not quite sure that her school was established as early as your question contemplates.

These, dear sir, are some of my old remembrances, which you may make such use of as you please.

Respectfully yours,

H. Humphrey.

LETTER FROM THE HON. JOSEPH T. BUCKINGHAM.

Cambridge, December 10th, 1860.

Henry Barnard, Esq.: *My Dear Sir*—I cheerfully comply with your request to give you some account of the schools and the educational books that were in use about the close of the last century. I never had the privilege of attending any higher institution of learning than the common district schools of Connecticut, in the town of Windham; but I have no doubt that those of that town were a fair type of many others, probably most of them, except such as were kept in the larger towns or thickly populated villages.

According to the best of my remembrance, my school-days began in the spring of 1783. The school to which I was admitted was kept by a lady, and, like most of the district schools, was kept only for the younger pupils, and was open for two months during the summer season. The upper class in the school was formed entirely of females—such as could read in the Bible. The lower classes read in spelling books and the New England Primer. The spelling books, of which there were not, probably, more than three or four in the school, I believe were all by Dilworth, and were much worn and defaced, having been a sort of heir-loom in the families of the pupils. The teacher of this school was the daughter of the minister of the parish. She kept a rod hanging on the wall behind her chair and a ferule on the table by her side; but I do not recollect that she used either of them. The girls who constituted the first class were required, every Monday morning, to repeat the text or texts of the preceding day's discourse, stating the book, chapter, and verse whence it was taken. The next summer, 1784, the same lady, or one of her sisters, kept school in the same district. The same books were in use, and there was the same routine of exercises. It was kept on the first floor of the steeple. The lower end of the bell-rope lay in a coil in the center of the floor. The discipline was so strict, that no one, however mischievously disposed, I believe, ever thought of taking hold of it, though it was something of an incumbrance. I was then four years and a half old, and had learned *by heart* nearly all the reading lessons in the Primer, and much of the Westminster Catechism, which was taught as the closing exercise every Saturday. But justice to one of the best of mothers requires that I should say that much the greater part of the improvement I had made was acquired from her careful instruction.

In December, 1784, the month in which I was five years old, I attended, for a few days, the school kept by a master—I do not remember his name. When asked up for examination, he asked me if I could read without spelling? I said

I could read in the Bible. He hesitated a moment, and then placed me on one of the benches, opened a Bible at the fifth chapter of Acts, and asked me to read. I read ten or a dozen verses—being the account of Ananias and his wife falling dead before Peter for telling a lie. Whether he had any suspicion that I had told a falsehood, and took this method to reprove me, I know not; but he dismissed me with approbation. He used his ferule on the hands of some of the elder boys; but the severest punishment that he inflicted for any violation of order, was compelling a boy who had brought into the school the breastbone of a chicken, (commonly called the *wishing-bone,*) and with which he had excited some noise among the pupils, to stand on one of the benches and wear the bone on his nose till the school was dismissed. I am strongly impressed with the belief that Webster's Spelling Book made its first appearance in the schools during this winter. The following summer I attended, but very irregularly, a school kept as before in the steeple of the meeting-house,* and had a copy of Webster. Whether there were any other copies in the school or not I am not able to say. The next two winters, circumstances which I have no desire to recall, and which you would not care to be acquainted with, prevented my attending any school. In the summer of 1786, these same circumstances caused me to be removed to another district three miles distant from the central village. The farmer with whom I lived thought I could read well enough, and as the district school-house was a mile or more distant, he considered it unnecessary to send me that distance in the winter, merely *to read;* and consequently for two or three winters I went to school not more than eight or ten days in each. At length, in 1790 or 1791, it was thought I was old enough to learn to *cipher*, and accordingly was permitted to go to school more constantly. I told the master I wanted to learn to cipher. He set me a *sum* in simple addition—*five columns* of figures, and *six figures* in each column. All the instruction he gave me was—add the figures in the first column, carry one for every ten, and set the overplus down under the column. I supposed he meant by the *first* column the left hand column; but what he meant by carrying one for every ten was as much a mystery as Samson's riddle was to the Philistines. I worried my brains an hour or two, and showed the master the figures I had made. You may judge what the amount was, when the columns were added from left to right. The master frowned and repeated his former instruction—added up the column *on the right*, carry one for every ten, and set down the remainder. Two or three afternoons (I did not go to school in the morning) were spent in this way, when I begged to be excused from learning to cipher, and the old gentleman with whom I lived thought it was time wasted; and if I attended the school any further at that time, reading and spelling, and a little writing were all that was taught. The next winter there was a teacher more communicative and better fitted for his place, and under him some progress was made in arithmetic, and I made a tolerable acquisition in the first four rules, according to Dilworth's Schoolmaster's Assistant, of which the teacher and one of the eldest boys had each a copy. The two following winters, 1794 and 1795, I mastered all the rules and examples in the first part of Dilworth; that is, through the various chapters of Rule of Three, Practice, Fellowship, Interest, etc., etc., to Geometrical Progression and Permutation.

In our district, the books were of rather a miscellaneous character, such as

* This was the last time I went to a *summer* school.

had been in families perhaps half a century or more. My belief is that Webster's Spelling Book was not in general use before 1790 or 1791. The Bible was read by the first class in the morning, always, and generally in the afternoon before the closing exercise, which was always a lesson in spelling, and this was performed by all the pupils who were sufficiently advanced to pronounce distinctly words of more than one syllable. It was the custom for all such pupils to stand together as one class, and with *one voice* to read a column or two of the tables for spelling. The master gave the signal to begin, and all united to read, letter by letter, pronouncing each syllable by itself, and adding it to the preceding one till the word was complete. Thus, a-d *ad*, m-i *mi*, *admi*, r-a *ra*, *admira*, t-i-o-n *shun*, *admiration*. This mode of reading was exceedingly exciting, and, in my humble judgment, exceedingly useful; as it required and taught deliberate and distinct articulation, and inspired the youngest with a desire to equal the older ones. It is true the voices would not all be in perfect unison; but after a little practice they began to assimilate. I have heard a class of thirty or more read column after column in this manner, with scarcely a perceptible variation from the proper pitch of voice. When the lesson had been thus read, the books were closed, and the words given out for spelling. If one was misspelt, it passed on to the next, and the next pupil in order, and so on till it was spelt correctly. Then the pupil who had spelt correctly went up in the class *above* the one who had misspelt. It was also a practice, when one was absent from this exercise in spelling, that he should stand at the foot of the class when he returned. Another of our customs was to choose sides to spell once or twice a week. The words to be spelt went from side to side; and at the conclusion, the side which *beat* (spelt the most words) were permitted to leave the schoolroom, preceding the other side, who had to sweep the room and build the fires the next morning. These customs, prevalent sixty and seventy years ago, excited emulation, and emulation produced improvement. A revival of them, I have no doubt, would be advantageous in the common schools, especially where pupils are required to spell words given out indiscriminately from a reading book or dictionary. There was not, to my knowledge, any *reading book* proper, except the Bible, till Webster's Third Book, so called, came out about 1793 or 1794. A new edition of his Spelling Book furnished some new matter for reading—selections from the New Testament, a chapter of Proverbs, and set of Tables, etc.; but none of these operated to the exclusion of the Bible.

In the family in which I lived there were three or four old spelling books, which I presume had been used in schools before the period of my remembrance. One of these was a book of less than a hundred pages, printed in London, I think in 1690. The words were arranged in tables according to syllables. The terminations tion, sion, cial, tial, etc., were all divided and printed as two distinct syllables. (And I believe this mode of printing is still continued in England. It was in the time of Lindley Murray, as may be seen in his spelling book, printed about forty years ago.) This spelling book contained a numeration table which, from a singular feature, early attracted my attention. Every figure was 9, and the whole formed a curious triangle. Thus:

9
99
999 and so on to
the last, 999,999,999

Another spelling book in our farmer's library was by Daniel Fenning, printed in London. It contained a short treatise on grammar, on which I sometimes exercised my memory, but understood not one of its principles. We had also a Dilworth, containing certain fables—such as Jupiter and the Frogs, the Romish Priest and the Jester, Hercules and the Wagoner, etc., etc. Another still we had, the author of which I never knew, as several pages had been lost from the beginning. It had a page of proverbs, one of which—"a cat may look upon a king"—occasioned me much thoughtful exercise. It also had an appropriate collection of couplets for writing-copies, of which the only one I recollect was this:

> "X things a penman should have near at hand—
> Paper, pounce, pen, ink, knife, hone, rule, plummet, wax, sand."

But that which rendered the book so memorable as never to be forgotten, was the astonishing, if not terrific, word of fourteen syllables—"Ho-no-ri-fi-ca-bi-li-tu-di-ni-tu-ti-bus-que"—asserted to be the longest word in the English language.

In the winter of 1793–4, we had for a teacher ERASTUS RIPLEY, an undergraduate of Yale College. I mention his name, because I can not but look back upon the time when I had the advantage of his instruction without a feeling of reverence for the man and respect for the teacher. I learned more from him than all the schoolmasters I had been under. He took more pains to instruct us in reading than all his predecessors within my knowledge. He opened the school every morning with prayer—which had not been practiced in our district. He was preparing for the ministry, and was afterwards settled at Canterbury, I think. He was highly esteemed by all the people of the district, and gave such an *impetus* to the ambition of the pupils, that a subscription was made to employ him an extra month after the usual term of the school had expired.

Mr. Ripley was succeeded in the winter of 1794–5 by a young man from Lebanon by the name of Tisdale, under whom my school-days were finished; and here I may bring this long and, I fear, very uninteresting letter to a close. Hoping this may serve the purpose for which you suggested the writing of it, and wishing you all the success you can desire in the noble cause in which you are engaged.

I am, very respectfully and truly yours,

JOSEPH T. BUCKINGHAM.

LETTER FROM REV. ELIPHALET NOTT, D. D., DATED JAN., 1861.

When I was a boy, seventy-five or eighty years ago, in good old Puritan Connecticut, it was *felt* as a practical maxim "that to spare the rod was to spoil the child;" and on this maxim the pedagogue acted in the school-room, and applied it for every offense, real or imaginary: and for having been whipped at school by the relentless master, the unfortunate tyro was often whipped at home by his no less relentless father; so that between the two relentless executors of justice among the Puritan fathers, few children, I believe, were spoiled by the withholding of this orthodox discipline. For myself, I can say (and I do not think I was wayward beyond the average of district school-boys) that, in addition to warnings, and admonitions daily, if I was not whipped more than three times a week, I considered myself for the time peculiarly fortunate.

Being of a contemplative and forbearing disposition, this discipline of the rod

became peculiarly irksome to me, and, as I thought, unjustifiable; and I formed a resolution, if I lived to be a man, I would not be like other men in regard to their treatment of children.

Through the mercy of God I did live to be a man, and when at the age of eighteen I became installed as master of a district school in the eastern part of Franklin, Connecticut—a school where rebellious spirits had previously asserted their rights, and been subdued or driven from the school by the use of the rod—nothing daunted, I made up my mind to substitute in my school moral motives in the place of the rod; and I frankly told my assembled pupils so, and that if they would have the generosity to second my efforts, they would secure to themselves and furnish me and their parents the happiness which is the heaven-appointed reward of well-doing.

The school responded to my appeal, and thereafter, though we played and gamboled together as equals in play-hours, and on Saturday afternoons, which were also devoted to play, the moment we entered the school-room, a subordination and application to study was observable, that became matter of remark and admiration among the inhabitants of the district, the fame of which success extended to other districts, and even to adjoining towns, so that the examination and exhibition with which the school closed the ensuing spring, called together clergymen and other officials from places quite remote.

This success brought me to the knowledge of the trustees of the Plainfield Academy, one of the most important, if not at the time the most important academy in the State, and I was by a unanimous vote appointed principal of said academy—an institution in which several hundred children of both sexes were in the same building successfully taught and governed for years, without the use of the rod, it being at that time the prevailing usage, both in district schools and academies, for the two sexes to be taught in the same room, and subjected to the same form of government.

This successful experiment in the use of moral suasion, and other kindred and kindly influences, in place of the rod, led to other and kindred experiments, until, whether for the better or the worse, the rod at length came to occupy a very subordinate place in the system of school education.

In those days, education in common schools was not so diffusive as at the present day; but quite as thorough, if not more so. The same remark may be applied to the higher schools or academies—the whole field of natural science being at that time, for the most part, unexplored; but mathematics and classics were zealously taught. In evidence of this, though inferior in attainments to some of my classmates, I published successfully myself an almanac when about twenty-one years of age.

As the rod in those days was the principal instrument in common school education, so, when I was afterward called to Union College, fines, suspensions, and expulsions were the principal instruments of collegiate government. The faculty sat in their robes as a court, caused offenders to be brought before them, examined witnesses, heard defenses, and pronounced sentences with the solemnity of other courts of justice: and though Union College had on its catalogue but a very diminutive number of students, the sitting of the faculty as a court occupied no inconsiderable part of the time of its president and professors.

Soon after I became connected with the college as its president, a case of discipline occurred which led to the trial and issued in the expulsion of a student

belonging to a very respectable family in the city of Albany. According to the charter of Union College, the sentence of the faculty is not final. An appeal can be taken to the board of trustees, and in the case in question an appeal was taken, and, after keeping college in confusion for months, by the different hearings of the case, the board reversed the decision of the faculty, and restored the young man. On the event of this restoration, I informed them that they should never, during my administration, have occasion to review another case of discipline by the faculty; and during the fifty-six years which have since passed away, I have kept my word; and though we have been less successful in our system of parental government than could be wished, we have have had no rebellions, and it is conceded, I believe generally, that quite as large a proportion of our young men have succeeded in after life as of any other collegiate institution in the Union.

RECOLLECTIONS OF PETER PARLEY.

The following picture of the District School as it was a few years later, in the town of Ridgefield,* one of the most advanced agricultural communities of Connecticut, is from the pen of Peter Parley, [Samuel G. Goodrich,] in his "*Recollections of a Lifetime.*"

About three-fourths of a mile from my father's house, on the winding road to Lower Salem, which bore the name of West Lane, was the school-house where I took my first lessons, and received the foundations of my very slender education. I have since been sometimes asked where I graduated: my reply has always been, "At West Lane." Generally speaking, this has ended the inquiry, whether because my interlocutors have confounded this venerable institution with "Lane Seminary," or have not thought it worth while to risk an exposure of their ignorance as to the college in which I was educated, I am unable to say.

The site of the school-house was a triangular piece of land, measuring perhaps a rood in extent, and lying, according to the custom of those days, at the meeting of four roads. The ground hereabouts—as everywhere else in Ridgefield—was exceedingly stony, and in making the pathway the stones had been thrown out right and left, and there remained in heaps on either side, from generation to generation. All round was bleak and desolate. Loose, squat stone walls, with innumerable breaches, inclosed adjacent fields. A few tufts of elder, with here and there a patch of briers and poke-weed, flourished in the gravelly soil. Not a tree, however, remained, save an aged chestnut, at the

* Nearly all the inhabitants of Ridgefield were farmers, with the few mechanics that were necessary to carry on society in a somewhat primeval state. Even the persons not professionally devoted to agriculture, had each his farm, or at least his garden and home lot, with his pigs, poultry, and cattle. The population might have been 1,200, comprising 200 families. All could read and write, but in point of fact, beyond the Almanac and Watts' Psalms and Hymns, their literary acquirements had little scope. There were, I think, four newspapers, all weekly, published in the State: one at Hartford, one at New London, one at New Haven, and one at Litchfield. There were, however, not more than three subscribers to all these in our village We had, however, a public library of some 200 volumes, and what was of equal consequence—the town was on the road which was then the great thoroughfare, connecting Boston with New York. and hence it had means of intelligence from travelers constantly passing through the place, which kept it up with the march of events.

western angle of the space. This certainly had not been spared for shade or ornament, but probably because it would have cost too much labor to cut it down, for it was of ample girth. At all events it was the oasis in our desert during summer; and in autumn, as the burrs disclosed its fruit, it resembled a besieged city. The boys, like so many catapults, hurled at it stones and sticks, until every nut had capitulated.

Two houses only were at hand: one, surrounded by an ample barn, a teeming orchard, and an enormous wood-pile, belonged to Granther Baldwin; the other was the property of "Old Chich-es-ter," an uncouth, unsocial being, whom everybody for some reason or other seemed to despise and shun. His house was of stone and of one story. He had a cow, which every year had a calf. He had a wife—filthy, uncombed, and vaguely reported to have been brought from the old country. This is about the whole history of the man, so far as it is written in the authentic traditions of the parish. His premises, an acre in extent, consisted of a tongue of land between two of the converging roads. No boy, that I ever heard of, ventured to cast a stone or to make an incursion into this territory, though it lay close to the school-house. I have often, in passing, peeped timidly over the walls, and caught glimpses of a stout man with a drab coat, drab breeches, and drab gaiters, glazed with ancient grease and long abrasion, prowling about the house; but never did I discover him outside of his own dominion. I know it was darkly intimated that he had been a tory, and was tarred and feathered in the revolutionary war, but as to the rest he was a perfect myth. Granther Baldwin was a character no less marked, but I must reserve his picture for a subsequent letter.

The school-house itself consisted of rough, unpainted clapboards, upon a wooden frame. It was plastered within, and contained two apartments—a little entry, taken out of a corner for a wardrobe, and the school-room proper. The chimney was of stone, and pointed with mortar, which, by the way, had been dug into a honeycomb by uneasy and enterprising penknives. The fireplace was six feet wide and four feet deep. The flue was so ample and so perpendicular, that the rain, sleet, and snow fell direct to the hearth. In winter, the battle for life with green fizzling fuel, which was brought in sled lengths and cut up by the scholars, was a stern one. Not unfrequently, the wood, gushing with sap as it was, chanced to be out, and as there was no living without fire, the thermometer being ten or twenty degrees below zero, the school was dismissed, whereat all the scholars rejoiced aloud, not having the fear of the schoolmaster before their eyes.

It was the custom at this place to have a woman's school in the summer months, and this was attended only by young children. It was, in fact, what we now call a primary or infant school. In winter, a man was employed as teacher, and then the girls and boys of the neighborhood, up to the age of eighteen, or even twenty, were among the pupils. It was not uncommon, at this season, to have forty scholars crowded into this little building.

I was about six years old when I first went to school. My teacher was Aunt Delight, that is, Delight Benedict, a maiden lady of fifty, short and bent, of sallow complexion and solemn aspect. I remember the first day with perfect distinctness. I went alone—for I was familiar with the road, it being that which passed by our old house. I carried a little basket, with bread and butter within, for my dinner, the same being covered over with a white cloth. When I

had proceeded about half way, I lifted the cover, and debated whether I would not eat my dinner then. I believe it was a sense of duty only that prevented my doing so, for in those happy days I always had a keen appetite. Bread and butter were then infinitely superior to *paté de foie gras* now; but still, thanks to my training, I had also a conscience. As my mother had given me the food for dinner, I did not think it right to convert it into lunch, and even though I was strongly tempted.

I think we had seventeen scholars—boys and girls—mostly of my own age. Among them were some of my after companions. I have since met several of them—one at Savannah, and two at Mobile, respectably established, and with families around them. Some remain, and are now among the gray old men of the town; the names of others I have seen inscribed on the tombstones of their native village. And the rest—where are they?

The school being organized, we were all seated upon benches, made of what were called *slabs*—that is, boards having the exterior or rounded part of the log on one side: as they were useless for other purposes, these were converted into school-benches, the rounded part down. They had each four supports, consisting of straddling wooden legs, set into auger holes. Our own legs swayed in the air, for they were too short to touch the floor. Oh, what an awe fell over me, when we were all seated and silence reigned around!

The children were called up, one by one, to Aunt Delight, who sat on a low chair, and required each, as a preliminary, to make his manners, consisting of a small sudden nod or jerk of the head. She then placed the spelling-book—which was Dilworth's—before the pupil, and with a buck-handled penknife pointed, one by one, to the letters of the alphabet, saying, "What's that?" If the child knew his letters the "What's that?" very soon ran on thus:

"What's that?"
"A."
"'Stha-a-t?"
"B."
"Sna-a-a-t?"
"C."
"Sna-a-a-t?"
"D."
"Sna-a-a-t?"
"E." &c.

I looked upon these operations with intense curiosity and no small respect, until my own turn came. I went up to the schoolmistress with some emotion, and when she raid, rather spitefully, as I thought, "Make your obeisance!" my little intellects all fled away, and I did nothing. Having waited a second, gazing at me with indignation, she laid her hand on the top of my head, and gave it a jerk which made my teeth clash. I believe I bit my tongue a little; at all events, my sense of dignity was offended, and when she pointed to A, and asked what it was, it swam before me dim and hazy, and as big as a full moon. She repeated the question, but I was doggedly silent. Again, a third time, she said, "What's that?" I replied: "Why don't you tell me what it is? I didn't come here to learn you your letters!" I have not the slightest remembrance of this, for my brains were all a-wool-gathering; but as Aunt Delight affirmed it to be a fact, and it passed into tradition, I put it in. I may have told this

story some years ago in one of my books, imputing it to a fictitious hero, yet this is its true origin, according to my recollection.

What immediately followed I do not clearly remember, but one result is distinctly traced in my memory. In the evening of this eventful day, the schoolmistress paid my parents a visit, and recounted to their astonished ears this, my awful contempt of authority. My father, after hearing the story, got up and went away; but my mother, who was a careful disciplinarian, told me not to do so again! I always had a suspicion that both of them smiled on one side of their faces, even while they seemed to sympathize with the old petticoat and penknife pedagogue, on the other; still I do not affirm it, for I am bound to say, of both my parents, that I never knew them, even in trifles, say one thing while they meant another.

I believe I achieved the alphabet that summer, but my after progress, for a long time, I do not remember. Two years later I went to the winter-school at the same place, kept by Lewis Olmstead—a man who had a call for plowing, mowing, carting manure, etc., in summer, and for teaching school in the winter, with a talent for music at all seasons, wherefore he became chorister upon occasion, when, peradventure, Deacon Hawley could not officiate. He was a celebrity in ciphering, and 'Squire Seymour declared that he was the greatest "arithmeticker" in Fairfield county. All I remember of his person is his hand, which seemed to me as big as Goliah's, judging by the claps of thunder it made in my ears on one or two occasions.

The next step of my progress which is marked in my memory, is the spelling of words of two syllables. I did not go very regularly to school, but by the time I was ten years old I had learned to write, and had made a little progress in arithmetic. There was not a grammar, a geography, or a history of any kind in the school. Reading, writing, and arithmetic were the only things taught, and these very indifferently—not wholly from the stupidity of the teacher, but because he had forty scholars, and the standards of the age required no more than he performed. I did as well as the other scholars, certainly no better. I had excellent health and joyous spirits; in leaping, running, and wrestling, I had but one superior of my age, and that was Stephen Olmstead, a snug-built fellow, smaller than myself, and who, despite our rivalry, was my chosen friend and companion. I seemed to live for play: alas! how the world has changed since I have discovered that we live to agonize over study, work, care, ambition, disappointment, and then ——?

As I shall not have occasion again, formally, to introduce this seminary into my narrative, I may as well close my account of it now. After I had left my native town for some twenty years, I returned and paid it a visit. Among the monuments that stood high in my memory was the West Lane school-house. Unconsciously carrying with me the measures of childhood, I had supposed it to be at least thirty feet square; how had it dwindled when I came to estimate it by the new standards I had formed! It was in all things the same, yet wholly changed to me. What I had deemed a respectable edifice, as it now stood before me was only a weather-beaten little shed, which, upon being measured, I found to be less than twenty feet square. It happened to be a warm, summer day, and I ventured to enter the place. I found a girl, some eighteen years old, keeping "a ma'am school" for about twenty scholars, some of whom were studying Parley's Geography. The mistress was the daughter of one of my schoolmates, and some of the

boys and girls were grandchildren of the little brood which gathered under the wing of Aunt Delight, when I was an a-b-c-darian. None of them, not even the schoolmistress, had ever heard of me. The name of my father, as having ministered unto the people of Ridgefield in some bygone age, was faintly traced in their recollection. As to Peter Parley, whose Geography they were learning—they supposed him some decript old gentleman hobbling about on a crutch, a long way off, for whom, nevertheless, they had a certain affection, inasmuch as he had made geography into a story-book. The frontispiece-picture of the old fellow, with his gouty foot in a chair, threatening the boys that if they touched his tender toe, he would tell them no more stories, secured their respect, and placed him among the saints in the calendar of their young hearts. Well, thought I, if this goes on I may yet rival Mother Goose!

At the age of ten years I was sent to the up-town school, the leading seminary of the village, for at this period it had not arrived at the honor of an academy, the institution being then, and many years after, under the charge of Master Stebbins. He was a man with a conciliating stoop in the shoulders, a long body, short legs, and a swaying walk. He was, at this period, some fifty years old, his hair being thin and silvery, and always falling in well-combed rolls over his coat-collar. His eye was blue, and his dress invariably of the same color. Breeches and knee-buckles, blue-mixed stockings, and shoes with bright buckles, seemed as much a part of the man as his head and shoulders. On the whole, his appearance was that of the middle-class gentleman of the olden time, and he was in fact what he seemed.

This seminary of learning for the rising aristocracy of Ridgefield was a wooden edifice, thirty by twenty feet, covered with brown clapboards, and, except an entry, consisted of a single room. Around and against the walls ran a continuous line of seats, fronted by a continuous writing-desk. Beneath, were depositories for books and writing materials. The center was occupied by slab seats, similar to those of West Lane. The larger scholars were ranged on the outer sides, at the desks; the smaller fry of a-b-c-darians were seated in the center. The master was enshrined on the east side of the room, contrary, be it remembered, to the law of the French savans, which places dominion invariably in the west. Regular as the sun, Master Stebbins was in his seat at nine o'clock, and the performances of the school began.

According to the Catechism—which, by the way, we learned and recited on Saturday—the chief end of man was to glorify God and keep his commandments: according to the routine of this school, one would have thought it to be reading, writing, and arithmetic, to which we may add spelling. From morning to night, in all weathers, through every season of the year, these exercises were carried on with the energy, patience, and perseverance of a manufactory.

Master Stebbins respected his calling: his heart was in his work; and so, what he pretended to teach, he taught well. When I entered the school, I found that a huge stride had been achieved in the march of mind since I had left West Lane. Webster's Spelling Book had taken the place of Dilworth, which was a great improvement. The drill in spelling was very thorough, and applied every day to the whole school. I imagine that the exercises might have been amusing to a stranger, especially as one scholar would sometimes go off in a voice as grum as that of a bull-frog, while another would follow in tones as fine and piping as a peet-weet. The blunders, too, were often ineffably ludicrous; even

we children would sometimes have tittered, had not such an enormity been certain to have brought out the birch. As to rewards and punishments, the system was this: whoever missed went down; so that perfection mounted to the top. Here was the beginning of the up and down of life.

Reading was performed in classes, which generally plodded on without a hint from the master. Nevertheless, when Zeek Sanford—who was said to have a streak of lightning in him—in his haste to be smart, read the 37th verse of the 2nd chapter of the Acts—"Now when they heard this, they were *pickled* in their heart"—the birch stick on Master Stebbins's table seemed to quiver and peel at the little end, as if to give warning of the wrath to come. When Orry Keeler—Orry was a girl, you know, and not a boy—drawled out in spelling: k—o—n, *kon*, s—h—u—n—t—s, *shunts*, konshunts—the bristles in the master's eyebrows fidgeted like Aunt Delight's knitting needles. Occasionally, when the reading was insupportably bad, he took a book and read himself, as an example.

We were taught arithmetic in Daboll, then a new book, and which, being adapted to our measures of length, weight, and currency, was a prodigious leap over the head of poor old Dilworth, whose rules and examples were modeled upon English customs. In consequence of the general use of Dilworth in our schools, for perhaps a century—pounds, shillings, and pence were classical, and dollars and cents vulgar, for several succeeding generations. "I would not give a penny for it," was genteel; "I would not give a cent for it," was plebeian. We have not yet got over this: we sometimes say *red cent* in familiar parlance, but it can hardly be put in print without offense.

Master Stebbins was a great man with a slate and pencil, and I have an idea that we were a generation after his own heart. We certainly achieved wonders according to our own conceptions, some of us going even beyond the Rule of Three, and making forays into the mysterious region of Vulgar Fractions. Several daring geniuses actually entered and took possession.

But after all, penmanship was Master Stebbin's great accomplishment. He had no magniloquent system; no pompous lessons upon single lines and bifid lines, and the like. The revelations of inspired copy-book makers had not then been vouchsafed to man. He could not cut an American eagle with a single flourish of a goose-quill. He was guided by good taste and native instinct, and wrote a smooth round hand, like copper-plate. His lessons from A to &, all written by himself, consisted of pithy proverbs and useful moral lessons. On every page of our writing-books he wrote the first line himself. The effect was what might have been expected—with such models, patiently enforced, nearly all became good writers.

Beyond these simple elements, the Up-town school made few pretensions. When I was there, two Webster's Grammars and one or two Dwight's Geographies were in use. The latter was without maps or illustrations, and was in fact little more than an expanded table of contents, taken from Morse's Universal Geography—the mammoth monument of American learning and genius of that age and generation. The grammar was a clever book; but I have an idea that neither Master Stebbins nor his pupils ever fathomed its depths. They floundered about in it, as if in a quagmire, and after some time came out pretty nearly where they went in, though perhaps a little obfuscated by the dim and dusky atmosphere of these labyrinths.

The fact undoubtedly is, that the art of teaching, as now understood, beyond the simplest elements, was neither known nor deemed necessary in our country schools in their day of small things. Repetition, drilling, line upon line, and precept upon precept, with here and there a little of the birch—constituted the entire system.

Let me here repeat an anecdote, which I have indeed told before, but which I had from the lips of its hero, G . . . H . . ., a clergyman of some note thirty years ago, and which well illustrates this part of my story. At a village school, not many miles from Ridgefield, he was put into Webster's Grammar. Here he read, "*A noun is the name of a thing—as horse, hair, justice.*" Now, in his innocence, he read it thus: "*A noun is the name of a thing—as horse-hair justice.*"

"What then," said he, ruminating deeply, "is a noun? But first I must find out what a horse-hair justice is."

Upon this he meditated for some days, but still he was as far as ever from the solution. Now his father was a man of authority in those parts, and moreover he was a justice of the peace. Withal, he was of respectable ancestry, and so there had descended to him a somewhat stately high-backed settee, covered with horse-hair. One day, as the youth came from school, pondering upon the great grammatical problem, he entered the front door of the house, and there he saw before him, his father, officiating in his legal capacity, and seated upon the old horse-hair settee. "I have found it!" said the boy to himself, as greatly delighted as was Archimedes when he exclaimed *Eureka*—"my father is a horse-hair justice, and therefore a noun!"

Nevertheless, it must be admitted that the world got on remarkably well in spite of this narrowness of the country schools. The elements of an English education were pretty well taught throughout the village seminaries of Connecticut, and I may add, of New England. The teachers were heartily devoted to their profession: they respected their calling, and were respected and encouraged by the community. They had this merit, that while they attempted but little, that, at least, was thoroughly performed.

As to the country at large, it was a day of quiet, though earnest action: Franklin's spirit was the great "schoolmaster abroad"—teaching industry, perseverance, frugality, and thrift, as the end and aim of ambition. The education of youth was suited to what was expected of them. With the simple lessons of the country schools, they moved the world immediately around them. Though I can recollect only a single case—that already alluded to of Ezekiel Sanford—in which one of Master Stebbins's scholars attained any degree of literary distinction, still, quite a number of them, with no school learning beyond what he gave them, rose to a certain degree of eminence. His three sons obtained situations in New York as accountants, and became distinguished in their career. At one period there were three graduates of his school, who were cashiers of banks in that city. My mind adverts now with great satisfaction to several names among the wealthy, honorable, and still active merchants of the great metropolis, who were my fellow-students of the Up-town school, and who there began and completed their education."

To the advantages, such as they were, of the district school, Mr. Goodrich adds an account of his experience on the farm, and his

juvenile sports, as well as his early attempts at *whittling* and other mechanical arts and adds the following reflections:—

Now all these things may seem trifles, yet in a review of my life, I deem them of some significance. This homely familiarity with the more mechanical arts was a material part of my education; this communion with nature gave me instructive and important lessons from nature's open book of knowledge. My technical education, as will be seen hereafter, was extremely narrow and irregular. This defect was at last partially supplied by the common-place incidents I have mentioned. The teaching, or rather the training of the senses, in the country—ear and eye, foot and hand, by running, leaping, climbing over hill and mountain, by occasional labor in the garden and on the farm, and by the use of tools—and all this in youth, is sowing seed which is repaid largely and readily to the hand of after-cultivation, however unskillful it may be. This is not so much because of the amount of knowledge available in after-life, which is thus obtained—though this is not to be despised—as it is that healthful, vigorous, manly habits and associations—physical, moral, and intellectual—are thus established and developed.

It is a riddle to many people that the emigrants from the country into the city, in all ages, outstrip the natives, and become their masters. The reason is obvious: country education and country life are practical, and invigorating to body and mind, and hence those who are thus qualified triumph in the race of life. It has always been, it will always be so; the rustic Goths and Vandals will march in and conquer Rome, in the future, as they have done in the past. I say this, by no means insisting that my own life furnishes any very striking proof of the truth of my remarks; still, I may say that but for the country training and experience I have alluded to, and which served as a foothold for subsequent progress, I should have lingered in my career far behind the humble advances I have actually made.

Let me illustrate and verify my meaning by specific examples. In my youth I became familiar with every bird common to the country: I knew his call, his song, his hue, his food, his habits; in short, his natural history. I could detect him by his flight, as far as the eye could reach. I knew all the quadrupeds—wild as well as tame. I was acquainted with almost every tree, shrub, bush, and flower, indigenous to the country; not botanically, but according to popular ideas. I recognized them instantly, wherever I saw them; I knew their forms, hue, leaves, blossoms, and fruit. I could tell their characteristics, their uses, the legends and traditions that belonged to them. All this I learned by familiarity with these objects; meeting with them in all my walks and rambles, and taking note of them with the emphasis and vigor of early experience and observation. In after days, I have never had time to make natural history systematic study; yet my knowledge as to these things has constantly accumulated, and that without special effort. When I have traveled in other countries, the birds, the animals, the vegetation, have interested me as well by their resemblances as their differences, when compared with our own. In looking over the pages of scientific works on natural history, I have always read with eagerness and intelligence of preparation; indeed, of vivid and pleasing associations. Every idea I had touching these matters was living and sympathetic, and beckoned other ideas to it, and these again originated still others. Thus it is

that in the race of a busy life, by means of a homely, hearty start at the beginning, I have, as to these subjects, easily and naturally supplied, in some humble degree, the defects of my irregular education, and that too, not by a process of repulsive toil, but with a relish superior to all the seductions of romance. I am therefore a believer in the benefits accruing from simple country life and simple country habits, as here illustrated, and am, therefore, on all occasions anxious to recommend them to my friends and countrymen. To city people, I would say, educate your children, at least partially, in the country, so as to imbue them with the love of nature, and that knowledge and training which spring from simple rustic sports, exercises, and employments. To country people, I would remark, be not envious of the city, for in the general balance of good and evil, you have your full portion of the first, with a diminished share of the last.

THE HOMESPUN ERA OF COMMON SCHOOLS.

The Rev. Horace Bushnell, D. D., of Hartford, a native of the Parish of New Preston, "composed of the corners of three towns, (Washington, Woodbury, and New Milford,) and the ragged ends and corners of twice as many mountains and stony-sided hills," in a Discourse pronounced at the Centennial Celebration of Litchfield County in 1851, thus describes the schools of his boyhood.

But the schools—we must not pass by these, if we are to form a truthful and sufficient picture of the homespun days. The schoolmaster did not exactly go round the district to fit out the children's minds with learning, as the shoemaker often did to fit their feet with shoes, or the tailors to measure and cut for their bodies; but, to come as near it as possible, he boarded round, (a custom not yet gone by,) and the wood for the common fire was supplied in a way equally primitive, viz., by a contribution of loads from the several families, according to their several quantities of childhood. The children were all clothed alike in homespun; and the only signs of aristocracy were, that some were clean and some a degree less so, some in fine white and striped linen, some in brown tow crash; and, in particular, as I remember, with a certain feeling of quality I do not like to express, the good fathers of some testified the opinion they had of their children, by bringing fine round loads of hickory wood to warm them, while some others, I regret to say, brought only scanty, scraggy, ill-looking heaps of green oak, white birch, and heaps of green oak, white birch, and hemlock. Indeed, about all the bickerings of quality among the children, centered in the quality of the wood pile. There was no complaint, in those days, of the want of ventilation; for the large open fireplace held a considerable fraction of a cord of wood, and the windows took in just enough air to supply the combustion. Besides, the bigger lads were occasionally ventilated, by being sent out to cut wood enough to keep the fire in action. The seats were made of the outer slabs from the saw-mill, supported by slant legs driven into and a proper distance through auger holes, and planed smooth on the top by the rather tardy process of friction. But the spelling went on bravely, and we ciphered away again and again, always till we got through Loss and Gain. The more advanced of us, too, made light work of Lindley Murray, and went on to the parsing,

finally, of extracts from Shakspeare and Milton, till some of us began to think we had mastered their tough sentences in a more consequential sense of the term than was exactly true. Oh, I remember (about the remotest thing I can remember) that low seat, too high, nevertheless, to allow the feet to touch the floor, and that friendly teacher who had the address to start a first feeling of enthusiasm and awaken the first sense of power. He is living still, and whenever I think of him, he rises up to me in the far background of memory, as bright as if he had worn the seven stars in his hair. (I said he is living; yes, he is here to-day, God bless him!) How many others of you that are here assembled, recall these little primitive universities of homespun, where your mind was born, with a similar feeling of reverence, and homely satisfaction. Perhaps you remember, too, with a pleasure not less genuine, that you received the classic discipline of the university proper, under a dress of homespun, to be graduated, at the close, in the joint honors of broadcloth and the parchment.

In an Address delivered by the editor when Superintendent of Common Schools in Connecticut, before the State Teachers' Association held at Washington, (in which town the Parish of New Preston is mainly situated) in 1850, the following reference was made to the past school habits of the people.

The School Society in which we are assembled is a beautiful and striking illustration of what an agricultural people can do, under many disadvantages, to cultivate the minds and souls of the children and youth, and to send out a race of men to achieve for themselves wealth and distinction, and reflect a true glory on the rugged homesteads where their childhood and youth were nurtured. New Preston enjoys a wide, and will enjoy a still wider celebrity for the number of eminently useful, and in some departments of effort, eminently distinguished men, whose birthplace was on these rugged hillsides, and whose bodily energy, and whose freshness and force of mind were secured by the pure air, the rough exposure, the healthy sports, and laborious toil of their country life. Bred as boys were, and still are in these agricultural homes, they can endure longest the wear and tear of hard study; and in the calmness and seclusion of their outward life, they can acquire that habit of reflection which appropriates knowledge into the very substance of the mind. There is also a freshness of imagination,—nurtured by wandering over mountain and valley, and looking at all things whether fixed like the everlasting hills, or growing and waving like the forests which diversify their sides, or giving out music and life like the streams which leap down and between,—which, untired in its wing, takes long and delightful flights. There is ardor and eagerness after eminence, which gathers strength like a long pent fire, and breaks out with greater energy where it has room to show itself. Above all there is often, and may be always, a more perfect domestic education, as parents have their children more entirely within their control, and the home is more completely, for the time being, the whole world to the family. Wherever these favorable circumstances are combined with the advantages of good teachers, good books, and the personal influence of educated men, as clergymen and physicians, there will boyhood and youth receive its best training for a long life of useful and honorable effort. How

much the labors of such men as Jeremiah Day, Ebenezer Porter, in the pulpit, and in their pastoral and school visitations—how much that old social library which once brought so many of the great and the good of other towns and other counties to join your firesides—how much your teachers from time to time, combined with the habits of labor, of thrift, and strict domestic culture and training, has had to do in giving to our State and country such men as the Days, the Wheatons, the Bushnells, the Whittleseys—it will be impossible to determine. It is enough that this little parish, as described by Dr. Bushnell, "made up of the corners of three towns and the ragged ends and corners of twice as many mountains and stony-sided hills," has exhibited the highest results of industrial, intellectual and religious training. The power of this little parish (with less than a thousand inhabitants,) it is not too much to say, is felt in every part of our great nation. Recognized, of course, it is not; but still it is felt.

NOTE.

The following is an imperfect list of the truly eminent and useful men which the schools and domestic training of this little agricultural community in less than fifty years has given to the public service of the country.

Nathaniel Smith, a lawyer, a member of Congress, and Judge of the Superior Court.
Nathan Smith, Lawyer and Senator in Congress.
Perry Smith, Lawyer and Senator in Congress.
Daniel N. Brinsmade, Lawyer, member of General Assembly forty-three sessions, Justice of the quorum ten years.
Ephraim Kirby, United States District Judge, Commissioner of the Revenue, and first reporter of Judicial decisions in Connecticut.
Daniel Sheldon, Secretary of Legation to France.
Nathaniel Pitcher, Lieut.-Governor of New York, acting Governor after Dewitt Clinton's death.
Zina Pitcher, M. D., (brother of the above,) a distinguished scholar and physician of Detroit.
Rufus Easton, Lawyer, Delegate in Congress from Missouri.
Elisha Mitchell, Professor in North Carolina College, Chapel Hill.
Charles Davies, LL. D., Professor of Mathematics, West Point.
Thomas J. Davies, father of the above, Judge and High Sheriff in St. Lawrence County, New York.
David C. Judson, Sheriff of St. Lawrence County.
Charles A. Judson, Sheriff of Litchfield County.
Thomas Hastings, Professor of Sacred Music, New York.
Orlando Hastings, Lawyer, Rochester, N. Y.
Seth Hastings, M. D., Clinton, New York.
Thomas Goodsell, M. D., Professor in several Medical Colleges, Utica.
Enos G. Mitchell, graduated at West Point, Capt. U. S. Army, died in Florida.
Isaac Goodsell, M. D., distinguished Physician, Woodbridge.
Amasa Parker, Judge in Delaware County, N. Y.
George A. Calhoun, D. D., Clergyman, Coventry.
Henry Calhoun, Clergyman, Ohio
Jeremiah Day, D. D., LL D., President of Yale College.
Nathaniel S. Wheaton, D. D., ex-President of Trinity College.
Thomas Day, LL. D., Secretary of State, Reporter of Judicial decisions, &c.
Elisha Whittlesey, LL. D., member of Congress, &c.
Frederick Whittlesey, vice Chancellor, New York, member of Congress.
Henry N. Day, LL. D., Professor in Western Reserve College, &c.

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X.—ORGANIZATION AND INSTRUCTION OF THE NATIONAL SCHOOLS OF IRELAND.

THE following Circular and Time Tables, selected from a Report of P. J. Keenan, Head Inspector, instructed by the Commissioners of National Education in 1855, to hold, what would be called in this country, a "Teachers' Institute," composed of practical teachers, whose business it is to visit different parts of the country for the purpose of assisting in the organization of schools, and diffusing a knowledge of the best principles and methods of instruction, throw much light on the aims and processes of the National Schools of Ireland.

CIRCULAR LETTER explanatory of the nature of SCHOOL ORGANIZATION, and the DUTIES of the ORGANIZERS and INSPECTORS in relation to it.

1. The objects which the Commissioners of National Education have had in view, in establishing the staff of organizers, are two-fold, viz.: —

A.—To bring National Schools into a state of efficiency.

B.—To diffuse amongst the teachers of the country a knowledge of Schoolmastership in all its practical bearings, and also of the leading principles of the Science of Education.

2. To carry out the first great object, (1 A), the organizers will devote themselves, during their stay in a school, to the following, as the main part of their duties.

3. To secure a regular and proper ventilation of the school-room.

4. To improve the lighting of the school-room, if necessary.

5. To make suitable arrangements as to the playground and out-offices.

6. To make every available use of the walls; to provide tablet rails, &c.

7. To arrange maps, charts, and tablets, and show how they can be most profitably used.

8. To provide black-boards, easels, pointers, arithmeticons, &c., and instruct the teachers as to their use.

9. To see that a sufficient number of desks is provided; that they are properly arranged and fixed on the floor; that provision is made for holding the slates; and that the business legitimate to the desks is regularly carried on.

10. To secure sufficient space for the drafts; to denote them by suitable marks on the floor; and to arrange the business proper to the drafts.

11. To classify the pupils, and divide them into convenient divisions and drafts.

12. To make out a time-table suitable to the circumstances of the school, and to test its judiciousness, by experiment, for a number of days before recommending its adoption to the Manager.

13. To see that the pupils, as well as the teacher, understand the arrangements indicated in the time-table.

14. To establish a sound system of monitorial instruction; to see that the members of the monitor class are judiciously selected; that they are sufficiently mature and intelligent for their duties; *that their employment as monitors does not interfere with their business as pupils;* that they be required to teach those subjects only which they are competent to teach; that they receive special instruction from the teachers, in lieu of the time spent by them in teaching; that the business arranged for their special instruction is regularly conducted; that they are instructed in the art of teaching; that they are taught to prepare notes of the lessons which they may be called upon to teach; that they know their duties prospectively; that they teach the same set of children from day to day for an assigned time; that their teaching is effective; that the pupils have sufficient respect for them, and confidence in their abilities; that such arrangements are made as to satisfy the parents of pupils and monitors with the monitorial system, and that the teacher is duly prepared to control and prepare the monitors for their duties.

15. Whilst monitorial instruction, *judiciously* and *moderately* employed, is encouraged, the organizers are to see that all the *essentials* of the education of a child are looked after and cared for by the teacher himself, and that the latter is to be almost constantly employed in the actual teaching of class after class, at the same time that he exercises an active superintendence over all the simultaneous operations of his school.

16. To establish a system of home lessons; to make arrangements for their regular announcement day after day; to see that they are properly heard; that the answering of the pupils is in some form noted; and that the general order of such lessons be kept in correspondence with the ordinary teaching pursued in the school.

17. To arrange for the regular recapitulation or repetition of the home and other lessons.

18. To make arrangements that the parents may be occasionally informed as to the attention of the children to the home lessons and general business of the school.

19. To exemplify before the teacher the different methods of teaching, and to cause him in turn to practise the same.

20. To see that he prepares "notes of lessons" in proper form, on the different subjects taught in the school, and that he teaches the various lessons in conformity with the notes so prepared.

21. To effect as much improvement as possible in the teaching of reading, writing, arithmetic, dictation, grammar, geography, drawing, &c., *and particularly in the teaching of the First Book.*

22. To see that the teacher gives clear evidence that he prepares himself beforehand *for the work of each day*, not only in the notes of the lessons which he is to teach, but also in the general business, including the simplest mechanical details of his school.

23. To drill the children, put them through the simple marching exercises, establish order and discipline, and train the teacher to continue the same course of drill and discipline so established.

24. To see that the business of the school is conducted with the least noise possible.

25. To establish a system of punishment for badly conducted children, and to introduce a system of emulation or reward, to promote good conduct.

26. To improve the manners of the children, and to see that there is a daily inspection as to cleanliness, &c.

27. To see that the children are provided with the necessary books for home study, and that a sufficient sale stock, and an ample supply of school materials and requisites are furnished.

28. To arrange as to the calling of the rolls with all possible despatch; to provide a report slate; to correct and show the teacher how to keep the school accounts, and to cause scroll rolls to be kept.

29. To adopt measures towards improving the attendance of the children, particularly with reference to punctuality in the morning.

30. Finally, the organizer is to lead the teacher into a strict observance of the rules of the Board, but especially the Practical Rules for Teachers.

31. The Commissioners of National Education have decided that no National school can be organized until the Manager express his desire to avail himself of the services of an organizer; and even after so expressing himself, and permitting the orgauizer to commence operations in his school, it is to be distinctly understood that he is not bound to carry out the plans or to effect the alterations suggested by the organizer.

32. The Inspectors should therefore select those schools only for organization, the Managers of which are likely to exhibit a kind and coöperative spirit to the organizers.

33. Before a school can be organized, the Manager must provide a sufficient sale stock for the use of the children attending it. As already announced to the Inspectors, the Commissioners, on the recommendation of the Head or District Inspector, or the organizer, will make a small grant of charts, black-boards, easels, pointers, &c., proportioned according to the wants and attendance of the school, not exceeding, however, except in special cases, the value of five pounds.

34. When an organizer enters a school, he is carefully to observe the methods of teaching pursued by teachers and monitors; the order, discipline, arrangements, and general organization of the school; and he is afterwards to report, on a form prepared for the purpose, the exact state in which he finds the school in all these respects. This report is called the *Preliminary Report.*

35. When an organizer has completed the organization of a school, he is to make a report of the order, discipline, system, &c., established by him; to detail the exact state in which he leaves the school; and to record the general results of the organization. This report is called the *Final Report.*

36. The organizer is then to forward the two reports just referred to, to the Inspector of the district in which the school is situated.

37. After a period of not less than three weeks, and not more than six weeks from the completion of the organization of the school, the Inspector of the district is to inspect the school, with a special view of ascertaining the effectiveness of the organization, and of examining and checking, in detail, all the points and statements contained in the organizer's final report.

38. The District Inspector is then to forward this report, along with the organizer's Preliminary and Final Reports, to the Head Inspector of the District, who will afterwards transmit them to this office.

39. During the time that a school is under organization the Inspector is not to make a formal inspection of it, nor sooner after the organization is completed than the time mentioned in paragraph 37; and it is the express wish of the Commissioners that the employment of an organizer in a district *may interfere as little as possible with the usual and regular business of inspection.*

40. It is, however, exceedingly desirable that the Inspector should make as many *incidental* visits as possible to a school under organization, to see that the work is proceeding with regularity and vigor; to confer with the Managers, and stimulate them to a hearty co-operation with the organizers; to assist in removing local difficulties or impediments, and to extend, as much as lies in his power, the advantages accruing to the National system from the operations of the organizers.

41. No organizer should, for the present, be sent to any place where there are not, *at*

least, four National Schools within a circuit of three miles from it, the Managers of which are desirous that their schools may receive the advantages of organization.

42. No less than four, or more than eight, schools are for the present to be organized by the same organizer in any particular locality.

43. As a general rule, the time spent in the organization of a school is not to exceed a fortnight; but the organizer is to return for a day or two, if necessary, before he leaves the locality in which the school is situated, to observe the results of the organization, and give such further instruction to teachers and monitors as the state of the school may at the time suggest as necessary and important.

44. The two weeks which may be spent by an organizer in a school are not to be consecutive; a week, in all cases, is to elapse between the first and second parts of the organization. For instance, where four schools, A, B, C, D, are to be organized, the following may be the order of organization:—

First week	A	Next week	C
Next week	B	Next week	D
Next week	A	Next week	C
Next week	B	Next week	D

45. The second great object which the Commissioners of National Education have had in view in establishing the staff of organizers, as already stated in paragraph 1 B, is "to diffuse a knowledge of schoolmastership in all its practical bearings, and also of the leading principles of the science of education amongst the teachers of the country."

46. To carry out this great object each organizer will deliver a course of lectures to the teachers who live in the neighborhood of the school in which he is engaged, upon method, order, discipline, school accounts, employment of monitors, construction of time-tables, arrangement of school furniture, use of charts, tablets, and apparatus, industrial education, and upon organization generally.

47. These lectures will take place on Saturdays, at whatever hour may be most convenient to the organizers and the teachers.

48. The District Inspector is to invite all teachers living within a reasonable walking distance—four or five miles—to those lectures; and whilst attendance is, under no circumstances, to be considered as compulsory, it is to be understood that the Commissioners will regard with satisfaction the conduct of those teachers who attend the instructions.

49. None but schoolmasters and monitors in their fourth year, are to attend the lectures of male organizers, and none are to attend the instructions of the female organizers but schoolmistresses and monitresses in their fourth year.

50. Teachers, whether trained or not, are eligible for admission into the organizers' classes; for it is hoped that both the trained and the untrained will derive such advantage from the instructions as to qualify them the better for a skilful and efficient discharge of their duties.

51. The organizers will keep a roll of the attendance of the teachers, and submit it at the end of the course of instruction to the District Inspector.

52. The organizers will require the teachers who may attend to take such notes during each lecture as will enable them to write out an abstract of it before the day for the following lecture; those abstracts and whatever other written exercises the organizers may require the teachers to prepare for them are to be examined and noted by the organizer, and submitted from time to time to the District or Head Inspector, to be afterwards, however, in the corrected state, returned to the teacher.

53. A statement will be made at the end of each course of lectures by the organizers, for the information of the Inspectors and Commissioners, of the attention paid by each of the teachers to their instructions, and of the proficiency which each of them shall have made.

54. As the duties of an organizer, when organizing a school, will be such as to prevent him from doing much more, in reference to methods of teaching, than exemplifying and carrying into practical effect the instructions contained in his lectures, no school can be organized, the teacher of which does not attend, or shall not have attended, a course of lectures either from him or some other organizer.

55. The Commissioners desire that the Inspectors should devote as much attention as possible to the arrangement and superintendence of those weekly meetings; and they also desire that the Inspectors should sustain and encourage the organizers on those occasions, uphold their authority, give weight to their position, and contribute by every means in their power to their success.

56. Before an organizer commences operations in a locality, the Inspector should have all necessary arrangements with Managers and teachers completed, as to the schools to be organized and the teachers who are to form the Saturday class for practical instruction.

57. Whenever a District Inspector feels that the services of an organizer are required for any particular group of his schools, all the conditions already announced being either fully complied with, or in a fair way of being so, he is to communicate with this office, giving information on the following points:—

(*a*) As to the centre which he proposes for the residence of the organizer, selecting, of course, no place in which a suitable lodging cannot be procured for him and his family.

(*b*) As to the schools which he recommends for organization and the distance of each from the proposed residence of the organizer.

(*c*) As to the number of teachers who would likely attend the lectures of the organizer upon Saturdays.

58. Each District Inspector is requested to inform this office, within a week after the receipt of this circular letter, upon the points enumerated in the previous paragraph.

59. The office, on receipt of those communications, will advise them to the Head

Inspector, whose duty it will be to select the schools proposed to be organized, to instruct the organizers as to the schools assigned them, and the time of the commencement of the organization, and immediately to advise the office as to the steps thus taken.

60. In order to place the object and details of the system of organization, and the machinery by which it is worked, as fully and clearly as possible before the Inspectors, the Commissioners append printed copies of the reports referred to in paragraphs 34 and 35. These reports, printed verbatim from the copies furnished by the organizer, are selected principally because the school to which they refer, from being one of the worst town schools in connection with the Board, has become, since its organization, distinguished for the neatness and completeness of its arrangements, and the general excellence of the order, discipline, and methods of teaching pursued in it. The Inspectors should peruse these reports carefully, inasmuch as they exhibit, with considerable precision, the chief points and details in the organization of a school.

61. The District Inspectors are requested to circulate, as extensively as possible, amongst Managers, teachers, and the public generally, information as to the object, scope, and leading features of organization; to let Managers understand that the presence of an organizer in their schools neither affects their privileges nor interferes with their functions; to inform teachers that organization is intended to diminish, in no way, their authority in their schools, or to degrade them in the estimation of their pupils or the parents; to acquaint all classes interested in the education of the people, that an organizer has nothing whatever to say or do in relation to the arrangements for religious instruction; that, on the contrary, it is the aim of the Commissioners, in the measures now taken by them for the improvement of their schools, to uphold the rights of Managers, to strengthen the power of the teachers, by rendering them more skilful servants of the public, and to realize what the Board have long desired to attain, a scheme of organization which, by combining all that educationists approve in the matter of instruction and commend in school keeping, will give a distinctive stamp and uniform character to the schools conducted on the National system.

The following extracts from Mr. Keenan's Report (1856) illustrates some of the above points.

School Organization.

In organizing an ordinary National School, the teacher should divide the school into two divisions; and he would arrange that the divisions should move alternately from floor to desks, desks to floor, and so on. He would appoint specific business for each division for every moment of the day, whether in the desks or on the floor, and the spirit of the whole organization would consist in the unflagging nature of the work from morning to evening. On the floor there would be the active *viva voce* lessons in reading, grammar, geography, arithmetic, spelling, geometry, algebra, mensuration, &c.; in the desks there would be the quiet work, requiring only superintendence and occasional examination or instruction, as writing on slates and paper, dictation, composition, drawing, slate arithmetic, lesson exercises, book-keeping, and industrial work. "Lesson Exercises" is a name which I have given to any exercise on paper or slate, which refers to some lesson previously learned. For instance, if it refer to grammar, the exercise may be to classify columnarly the parts of speech of the words of a sentence, to write out the derivations of a number of words dictated to them, &c.; if it refer to the Lesson Books, the exercise may be to write out the substance of the lesson read a little previously upon the floor, or to summarize the lessons of a section of one of the books, &c.; if it refer to geography, the exercise may be to write down the manufactures, population, imports, exports, &c., of some country, or to draw an outline map of it; and no matter, in short, what the subject may be, it will afford material for this very useful and interesting exercise, which has the advantage of being always an appeal to the judgment as well as to the memory.

The organizer takes care that there shall be no "preparing lessons," home being the place for that, the suitable place where even if there were no improvement on the hour and forty minutes' plan, it would be still desirable to enforce habits of reading and study and of preparation for the business of the school. The arrangement into two divisions — the rotation being from desk to floor and floor to desk throughout the day — would be called a bipartite organization; but if the school were large and possessed the convenience of a gallery or class-room, the arrangement might consist of three divisions, the rotation being from desk to floor, floor to gallery, gallery to desk, it would be called a tripartite organization. The result of these arrangements is, that there are either two or three distinct courses of business going on at the same time, each course of business being regularly arranged and properly defined, and having strict reference to the gradual development of the education of the children in the school. There can be no haphazard work, no fortuitous employment; every one must be constantly engaged, the master teaching and the pupils learning. In Holland, one of the state laws declares — "The instruction shall be communicated simultaneously to all the pupils in the same class, and *the master shall take care that during that time the pupils of the two other classes are usefully employed.*"

Tripartite System.

If the school be large, the teaching power sufficient, and a class-room or gallery at his disposal, the organizer decides upon the tripartite system, and arranges the school into three divisions, the junior, the middle, and the senior. The junior division may be composed of the first class, the middle division of the second and sequel classes, and the senior division of the third and fourth classes. Sometimes it may be necessary, although to be avoided if possible, to break up a class and place the lower portion of it in one division, and the higher portion in another. For instance, the lower section of Second Book might be placed in the junior division; the middle division might include the higher section of second and the sequel class, and the senior division, as before, might contain the third and fourth classes. The head master might possibly have *special* charge of the senior division, the assistant master of the middle division, and a paid monitor might have the care of the junior division. The routine working of the tripartite system is very simple. The business of the day, say, commences with the senior division upon the floor. The head master, having a monitor in each draft of it, goes from draft to draft, revising what has been done by the monitors, and giving the substance of the lesson for the time being to each class as he passes along. The middle division is at this time, say, in the gallery, receiving a simultaneous lesson from the assistant master on some subject appropriate to the gallery; and the junior division is in the desks under the monitor, engaged in some befitting desk occupation. The head master, although having special charge of the senior division, is yet master of the whole school, and he must so contrive his duties, that whilst he teaches his own division, his influence and superintending function shall be felt and exercised in each of the other divisions of the school. Accordingly, whilst the divisions are disposed of as I have represented them, for the first lesson of the day, he must, in addition to the immediate instruction which he gives his own division, turn to the junior division in the desks, see how the monitor is managing it, take a momentary part in the teaching, and make a cursory inspection of what the children are employed at. This must be done without causing gaps or incoherency in the teaching of his own division, every draft of which must receive its share of his services, and every monitor in which must account to him for all that he is doing and for the proficiency of his pupils. He must also pay an occasional visit to the gallery, to see that his assistant is instructing the middle division with intelligence and effect; and that he exhibits evidence of having carefully prepared himself for the lesson. The order of the whole school is to be watched; a monitor inclined to rest upon his oars is to be aroused; a child disposed to idle is to be admonished. Every one must be employed; every monitor must be in earnest; every blackboard must show that work is being done. The quality of the instruction must be looked after; there must be no lounging or yawning or talking or whiling time away. He must know the extent of the instructions which have been given in the desks and in the gallery. The lesson has now lasted for thirty minutes; the bell announces the time up for a change, and in a moment the three divisions are simultaneously in motion. In less than half a minute they have all changed places. The senior division has gone from the floor to the desks; the junior from the desks to the gallery; the middle from the gallery to the drafts on the floor. There is no noise or confusion in the movement, no roaring out the orders; the stroke of the bell by the monitor of order, or the head master, is sufficient to announce the change. Immediately that the divisions reach their places, business is resumed. The head master starts his division at once to work in the desks; the assistant is going through a course with his drafts on the floor, similar to that pursued by the head master during the previous lesson; and the monitor is busy with his division in the gallery. The head master has more leisure now to pay attention to the junior and middle divisions, for his own division is engaged at some silent occupation in the desks, which only requires superintendence and occasional examination. He may possibly exchange with the monitor, and give the simultaneous lesson to the junior division in the gallery, or he may go from draft to draft through the middle division, and confer with his assistant as to the state of each draft, the industry or the ability of each monitor, and the whole scheme of the instruction of the division. It requires only an occasional minute to pass through the desks and overlook and correct the exercises of his own, the senior division, or he may spend four or five minutes with it consecutively, in explaining the principle of what it is engaged at, whether writing, or drawing, or book-keeping, or composition, or whatever else the lesson may happen to be. The same activity and the same watchfulness prevail during the second lesson, as during the first; and when the allotted time, thirty minutes, more or less, is up, the bell again rings, and again the simultaneous movement is made. As before, there is no noise; no confusion; no trampling of feet; no blundering; in silence and order each division reaches its new place. The junior division has moved from the gallery to the floor; the middle division now

occupies the desks; and the senior division has marched to the gallery. Business has again commenced. The head master is giving a simultaneous lesson in mechanics, geometry, geography, or some other gallery subject; the monitor is engaged with his junior division on the floor; the assistant has the copies or slates, or pens or pencils, distributed in the desks, and his division is soon in full work. Every body is engaged. The change of place has relieved the minds of the pupils, the change of subject and position has protected the teachers from tedium or fatigue. Already much solid business has been done, much permanent good accomplished. The assistant has now time to turn for a moment from the desks to the junior division, and to coöperate with the monitor in instructing his drafts. He controls and directs the monitor whilst he aids him, keeps an eye to the general order of the room, and reports to the head master how matters proceed during his absence in the gallery. If the lesson which is being given in the gallery, admits of a break or rest in the middle, or in any part of it, the head master may take a brief glance at the principal school, have a word with the assistant or the monitor, and return to finish the lesson with his division, or, in order that he may occasionally have an opportunity of examining the pupils of the junior division in their drafts upon the floor, and those of the middle division whilst they are engaged at some desk occupation, he may change places with the assistant master, having previously given him notice of his intention, allowing the latter to give the gallery lesson to the senior division, whilst he himself takes charge of the divisions in the principal room. And thus in a quiet orderly rotation of this kind, in a life-like series of changes, with every body busy, every body happy; the head master guiding and inspiriting his assistant and his monitors; his influence every where; the instruction progressive; results, sterling and impressionable, produced at every lesson, is a school conducted on the tripartite system of organization.

Bipartite System.

By the Bipartite System the school is arranged in two divisions, the junior and the senior; and even without the assistance of a paid monitor, a teacher following the system laid down by the organizers could conduct a school with the same energy and effect, as that which I described in the case of the school organized on the tripartite system. The master of a bipartite school has always one division in the desks, another on the floor; the rotation is from desks to floor, and floor to desks. It does not require the same exertion to teach and superintend a bipartite, as a tripartite school. The master has a limited number of children; the operations of the school are concentrated into one room; he never quits the gaze of the main body of his pupils; the changes are easily made; and he has but to labor assiduously to insure success. The pupils of a tripartite school have the advantage of gallery instruction, which is not embraced in the bipartite system; but in other respects, the latter is just as effective as the former. By omitting what relates to the gallery, from the illustration which I gave of the tripartite system, and by substituting an intelligent paid or unpaid monitor for the assistant, the description would answer just as accurately for the simple operations of a bipartite school. I need not, therefore, describe the order of procedure in a school of the latter kind. The golden rule of either system is, that the teacher as well as the pupil is constantly employed; that he has a special duty for every moment of the day; and that he discharges this duty in such a way that he can superintend the whole of the operations of his school.

Modified Monitorial Teaching.

The Commissioners of National Education have always encouraged monitorial teaching; they have seen that a child who is employed, at stated times, in the teaching of a class of his fellow-pupils, is rendering most valuable assistance to the master, is improving himself in knowledge, and is obtaining a taste, and undergoing the best possible training for becoming a teacher. They approached the consideration of the question with the greatest care. They never contemplated conducting a large school solely by monitorial assistance; nor did they ever permit their monitors to forget that they are pupils. The first regular monitors in the service of the Board, were those in the Model Schools, Dublin, so far back as March, 1833. Some were paid, and others acted gratuitously. One of the greatest prizes and highest distinctions in the school was to attain to a monitorship. At one time during school hours the monitors taught some of the classes, and at another time they were themselves instructed; and, before school hours, there was a special course of instruction always given them.

The Commissioners, in their Report for 1837, refer to a new system of remunerating this class of young persons, in the Model Schools they were intending to establish throughout the country, which shows the permanency of the monitorial system at that early period in the history of the Board. They say, "that

the money, so paid (in school fees), shall constitute a school fund, and that it shall be divided into such proportions, as we may determine, between the head master, his assistant, and the most advanced of the monitors whom he may employ." The system was always worked with moderation; it was free from the wild pretensions of the plans of Bell and Lancaster; and the pupilary and the monitorial functions were happily coalesced. It was the first rational trial, in my mind, which was given to monitorial teaching in these countries. In their Report for 1846, the Commissioners refer to the fruits of the system; they develop its organization, and they announce their determination to extend it to the Ordinary National Schools throughout the country. Each monitor was to serve for a period of four years; at the end of each year there was a sifting examination as to his proficiency; his teacher was required to employ him moderately as a monitor, and freely as a pupil; and his income increased each year up to the last of his service.

The system received a further development by the institution of a small staff of pupil-teachers in each of the Model Schools, who, in most cases, were the elite of those monitors who had completed their fourth year of service. It should be remembered, that the functions of the pupil-teacher and the monitor are very different; the former is more fo a teacher than a pupil; the latter more of a pupil than a teacher.

In 1855, the monitorial system received a still further extension of its usefulness, by the appointment of a number of junior paid monitors, commencing at eleven years of age, and serving for three years; to receive £2 for the first year, £3 the second, and £4 the third. If the conduct and attainments of a junior paid monitor be satisfactory at the end of his period of service, he is then drafted into the ranks of the senior paid monitors, to serve for four years more, and receiving respectively each year, £5, £6, £8, and £10. The paid monitor is now eighteen years of age, and should he persevere in his intention to become a teacher, and exhibit the necessary qualification, he may then be appointed to a pupil teachership in a District Model School, in which he remains for twelve months or two years. In this last stage, his professional education is carried to such a degree, as to qualify him in the most superior way for the offices of teaching; and at the expiration of his stay in the Model School, he is very likely at once nominated to the charge of an Ordinary National School. After serving a year or two as teacher of a school, and becoming acquainted with the difficulties and the responsibilities of the position, he is then brought up to Dublin to receive a final course of training in the Central Institution, Marlborough Street.

Elaborate and well designed as each step in this gradation of monitorial training really is, and superior as have been the results flowing from it, there yet remained a gap in it, the want of a regular scheme of unpaid monitors, which has been filled up by the system of organization, and which has tended to make our monitorial system still more comprehensive and perfect. When a school is being organized, the organizer selects a class which is called "the monitor's class," from amongst the most deserving and intelligent children of the school; he admits as many as possible into the class, in order that the duties may be distributed amongst them and be light upon each; he impresses upon them the importance of their new position and the extent of the distinction which is conferred upon them; and he then arranges that in lieu of the hour a day during which, on the average, they will be called upon to teach, they shall receive an hour's extra special instruction before or after the regular school business. Wherever practicable, it is better that the instruction should be given before school hours, as the minds of the children are fresh and the teacher himself is vigorous. The subjects which are specially taught during the time for extra instruction, are those which bear most upon the duties of the monitor, the preparation of notes of the lessons, and the art of teaching; and care is taken that this instruction supplementalizes and completes the course of business of the day. In order to encourage the teachers to take an interest in the instruction of their monitors, and as a recompense for the additional duty imposed upon them, the Commissioners grant an annual gratuity of £1 for each paid monitor of the first year, £1 10*s.* for each paid monitor of the second year, £3 for each paid monitor of the third or fourth year, and £4, as I have already stated, for the careful instruction of an unpaid monitor's class in any school which is organized. Every school that is organized will thus have its staff of unpaid monitors. Some of them, in the course of time, will be placed on the list of junior monitors, be again drafted into the class of senior monitors, and be finally appointed as pupil-teachers in a District Model School. During each stage they are pupils one hour, monitors the next; blending the didactic with the studious; rising in powers of thought and expression with their daily experience in teaching, and feeling the counterpoising and disciplinal influences of submission and authority.

Specimens of Time Tables.

No. 1.—Boys' School.—Tripartite Organization.

Time.	Junior Division.	Middle Division.	Senior Division.
10½ to 11	Home Lessons & Reading alternately. Floor.	Drawing. Desks.	Geography & Grammar alternately. Gallery.
11 to 11½	Writing. Desks.	Geography & Grammar alternately. Gallery.	Home Lessons. Floor
11½ to 12	Geography & Grammar alternately. Gallery.	Home Lessons. Floor.	Writing. Desks.
12 to 12½	Arithmetic. Floor.	Writing. Desks.	Reading. Gallery.
12½ to 1	. . . . .	Recreation in Playgr'd.	. . . . .
1 to 1½	Theory of Arithmetic, Object Lesson, & Singing, alternately. Gallery.	Arithmetic. Floor.	Dictation. Desks.
1½ to 2	Reading and explanation. Floor.	Dictation. Desks.	Theory of Arithmetic, Object Lesson, & Singing, alternately. Gallery.
2 to 2½	Dictation and Drawing alternately. Desks.	Theory of Arithmetic, Object Lesson, & Singing alternately. Gallery.	Arithmetic, Algebra, &c. Floor.
2½ to 3	Tables and Mental Arithmetic. Gallery.	Reading. Floor.	Drawing. Desks.
3 to 3½	Dismissed.		Algebra (M.), Mens. (T.), N. Phil. (W.), Geometry (Thurs.), Bookkeeping (F.)
3½ to 4	Dismissed.		Geometry (M.), Bookkeeping (T.), Algebra (W.), Mens. (Thurs.), Nat. Philosophy (F.)

Religious Instruction from 10 to 10½ o'clock.

No. 2.—Girls' School.—Tripartite Organization.

Time.	Junior Division.		Middle Division.		Senior Division.	
H. M. H. M.	1st Class.	2d Class	Sequel.	3d Class.	4th Class.	5th Class.
10 30 to 10 55	Geography and Grammar. Gallery.		Dictation and Drawing. Desks.		Home Lessons. Floor.	
10 55 to 11 20	Dictation and Drawing. Desks.		Home Lessons. Floor.		Geography and Grammar. Gallery.	
11 20 to 11 45	Home Lessons. Floor.		Geography and Grammar. Gallery.		Dictation and Drawing. Desks.	
11 45 to 12 15	Reading. Gallery.		Writing. Desks.		Arithmetic. Floor.	
12 15 to 12 45	. . . General Les		son and Recreation in		Playground.	
12 45 to 1 15	Writing. Desks.		Reading. Floor.		Mon., Arithmetic; Tu., Object Lesson; Wed., Globes; Thurs., Art of Reading. Gallery.	
1 15 to 1 45	Reading. Floor.		Arithmetic. Gallery.		Writing. Desks.	
1 45 to 2 15	Arithmetic. Gallery.		Slate Arithmetic. Desks.		Reading. Gallery.	
2 15 to 2 30	. . . Work and		Natural History, or Do		mestic Economy. . .	
2 30 to 3 0	. . . . .		Work and Singing.		. . . . .	

Religious Instruction from 10 to 10½ o'clock.

No. 3.—Boys' School.—Bipartite Organization.

Time.	Junior Division.		Senior Division.		
H. M. H. M.	1st Class	2d Class.	Sequel.	3d Class.	4th Class.
10 0 to 10 5	. . . . . Inspection as to personal cleanliness.				
10 5 to 10 45	Dictation. Home Lessons.				
10 45 to 11 15	Home Lessons and Reading. Dictation.				
10 15 to 11 45	Writing. Arithmetic, Algebra, Geometry, &c.				
11 45 to 11 50	. . . Rolls called and attendance entered in Report Book. . . .				
11 50 to 11 55	. . . . . General Lesson read.				
11 55 to 12 30	Reading and Spelling. Writing.				
12 30 to 12 40	. . . . . Recreation.				
12 40 to 1 10	Lesson Exercise. Geography and Grammar alternately.				
1 10 to 1 30	Geography. Drawing and Composition alternately.				
1 30 to 2 0	Drawing. Reading and Explanation.				
2 0 to 2 30	Arithmetic. Arithmetic in Desks.				

Religious Instruction from 2½ to 3 o'clock.

No. 4.—Mixed School—Attended by Boys and Girls.—Bipartite Organization.

Time.	Junior Division consists of First Class and Third Draft of Second.	Senior Division consists of First and Second Draft of Second Class, Sequel, Third, and Fourth Classes.
H. M. H. M.		
10 30 to 11 0	Home Lessons.	Writing.
11 0 to 11 30	Writing	Home Lessons.
11 30 to 11 55	Arithmetic.	Dictation.
11 55 to 12 0	Rolls called, Report entered,	and General Lesson read.
12 0 to 12 10	Boys Arithmetic.	Girls play.
12 10 to 12 20	Boys play.	Girls sew.
12 20 to 12 50	Lesson Exercise. Girls sew.	Arithmetic.
12 50 to 1 20	Reading.	Lesson Exercise. Girls sew.
1 20 to 1 40	Drawing. Girls sew.	Grammar and Geography alternately.
1 40 to 2 0	Grammar and Geography alternately.	Drawing. Girls sew.
2 0 to 2 30	Desk Arithmetic. Girls sew 10 minutes.	Reading.

Religious Instruction from 10 to 10½ o'clock, and from 2½ to 3 o'clock.

Syllabus of Lectures on Methods of Instruction.

I.—Method in General.

a. Definition.—Literal meaning: true method is a way of transit from one to the other of related things—a unity with progression: a mental act: relations of things are its materials: it is never arbitrary: the habit of method results from education: arrangement or order is not method: its great principles are union and progression: it leads to thoughtfulness, understanding, learning, and application.

b. Importance.—In domestic affairs: agriculture: construction of a watch: discourse, private or public: poetry—a play: meditation—science: education—starting point, object to be attained, and course: in this course the teacher should assist and direct, develop facts, prevent idleness, and advance gradually.

c. Necessity for.—All is chaos without it: no convenient arrangement: no natural disposition of things: no solid progress can be made: the rambling, incoherent character of ordinary teaching.

d. Divisions.—The two great methods are Synthesis or Induction, and Analysis or Deduction: the subordinate methods are the Socratic, Didactic, Elliptical, &c.

II.—The Two Great Methods.

By these every subject may be treated.

a. Synthesis.—Literal meaning of the term: is a putting together the parts or elements of any subject, step by step: also called Induction: proceeds from the simple to the complex—the particular to the general: it is the natural method: best adapted for elementary instruction: all educationalists are agreed upon this point: its great reviver and supporter in modern times was Pestalozzi (Zurich, 1745): he first taught *sounds*, then *words*, then *language*.

ILLUSTRATIONS. — READING — letters, syllables, words, sentences, paragraphs, &c.: the difficulty of teaching reading in our language arises from the different sounds of the same letter, particularly of each vowel: this is very considerably obviated by the synthetic arrangement of our Lesson Books: examine the First Book; its structure is purely synthetic: letters taken by twos to form such words as *an*, *ox*, &c.: in the next section we have distinct lessons on ă, ĕ, ĭ, ŏ, ŭ: then a mixture of all these in the next five lessons: the next five lessons are on ā and ă, ē and ĕ, ī and ĭ, ō and ŏ, ū and ŭ, respectively: in the concluding lessons of the section we have a mixture of these several sounds: the first five lessons of the third section give the short sounds of the vowels followed by *two consonants*, as *act*, *elm*, &c.: then a mixture of these: next *a* as in *ball*: *o* in *love*: a combination or mixture of *long* and *short* sounds and *double consonants*, as in *cheese*, *shell*, &c.: *diphthongs*: *digraphs*: silent *consonants*: peculiar sounds: combinations of *three* consonants: the beauty and method of this arrangement.

WRITING affords another example of synthesis: straight lines: curves: crotchet letters: capitals: Mulhauser's system; not his invention; he reduced the number of elements and arranged them synthetically: his merit lies in this.

DRAWING, another illustration of synthesis: straight lines | — \ /: curves ⌒ ⌢ ⌣ ( ): combinations of these with straight lines: the circle: the ellipse: combinations, &c.

GEOMETRY — definitions, postulates, axioms, and propositions.

CHEMISTRY — the formation of water by detonating by means of the electric spark, the proper mixture of oxygen and hydrogen.

MUSIC affords another illustration of synthesis: Hullah's system of teaching music is an admirable example of pure synthesis.

b. Analysis. — Literal meaning of the term: the separation of a compound into its component parts: also called Deduction: proceeds from the complex to the simple — the general to the particular: the opposite of synthesis: Jacotot its great supporter in modern times.

ILLUSTRATIONS: — LANGUAGE — sentences, clauses, words, and letters: CHEMISTRY — the decomposition of water by means of the galvanic battery: GEOMETRY — the deducibles: bread.

c. Application. — Analysis has been compared to the efforts of a traveller proceeding from the mouth of a river to its source, and synthesis to the efforts of the same traveller in retracing his steps to the mouth: both methods used in the discovery of truth: hence, they may be mutually employed: exclusive use of either unsuccessful: the analytic more used in the discovery of truth, the synthetic in conveying instruction: he who would teach synthetically must first analyze: the method to be used depends on the subject, and the pupils, and the teacher: every teacher should be an expert analyst: analysis cannot be used in teaching signs to children: they get their knowledge synthetically: they do not analyze: hence, synthesis must prevail in every subject: consistent facts only should be stated: avoid analysis till the mind is considerably developed: it is not to be used in teaching the junior classes: "Easy Lessons on Reasoning" — the first eight chapters analytical, and the remaining ones synthetical.

III. — SUBORDINATE METHODS.

a. Socratic consists of a series of questions logically or methodically arranged: also called Catechetical or Interrogative: either analytic or synthetic: teaching may be catechetical without being Socratic: *this form* prevails in ordinary schools: the remedy: directions for questioning: —

1. The question, both in matter and language, should be within the comprehension of the pupils.
2. It should be precise, so as to admit of a definite answer.
3. It should be such as not to admit of a simple "yes" or "no" for the answer.
4. It should not require a very long answer.
5. The questions should be methodical — a progressive order or chain of questions: simple to complex, or *vice versa*.
6. The questions should be interspersed with explanatory remarks from the teacher.

The uses of this method are two: — First, for examination: second, for conveying instruction: "*Instruct* the pupils by questioning knowledge into them, and *examine* by questioning it out of them:" the catechetical consists of three stages: preliminary questions, questions of instruction, and questions of examination: a good plan to let pupils question one another.

Cautions: — simultaneous answers: defective answers: wrong answers: correct them indirectly: random answers: good answers — approbation: answers in a pupil's own language: to arouse the listless pupil: thinking time: suggestive questions: book or author: "Is he right?"

b. Elliptic Method. — What is it: used during the progress of the lesson, that is, in teaching, and in examination: particularly applicable in examining upon an anecdote: its advantages — does not interrupt the continuity of the lesson, is more concise than the catechetical, and relieves it: directions for forming ellipses: —

1. A good ellipsis is equivalent to a good question.
2. The elliptic method should be associated with the catechetical.
3. The ellipsis should be adapted to the capabilities of the pupils.
4. It should be adapted to their attainments.
5. It should not admit of an ambiguous answer.
6. It should not end with "*what*," "*how*," &c.

c. Dogmatic. — What is it: neither analytic nor synthetic: becomes analytic when accompanied by explanation.

d. Didactic.

e. Explanatory.

f. Picturing out, &c.

XI. SUBJECTS AND METHODS OF EARLY EDUCATION.*

BY THOMAS URRY YOUNG.

I. NECESSITY AND NATURE OF THE INFANT OR PRIMARY SCHOOL.

The idea of collecting very young children for elementary instruction is not new; schools for infants have long existed under the name of *Dame Schools.* Indeed the embarrassment arising from the union of children widely differing in age generally led either to the separation of the younger portion, or to their entire neglect. Very little observation and reflection are required to convince us of the marked disparity in the state of mind in children of various ages, which, when we address them familiarly, we involuntarily admit, by bringing our language and ideas to their level; and they themselves generally divide into groups, according to their age for conversation or play. No judicious teacher overlooks this fact, or attempts to unite in one class pupils of five years of age with others of ten and twelve. It is not, therefore, in the mere collecting of young children together, but in the kind of instruction given, and in the mode of communicating it, that the infant school system differs essentially from any previous form of elementary teaching. Under the old system, little was attempted until the child had learned to read; and, during this long and painful interval, the monotony of the school-room was seldom varied by any thing to interest or amuse the little pupil. No physical exercises relieved the wearied body, but all was starched formality, and what was called good order. Immured in a close dull room—all the joyous freedom of infancy repressed—the eyes vacantly poring over the unexplained mysteries of learning's first page, the only motives to exertion being the dread of the fool's cap, or of the

> "Tway birchen sprays, with anxious fear entwined;
> With dark distrust and sad repentance filled;
> And steadfast hate, and sharp affliction join'd,
> And fury uncontroll'd, and chastisement unkind."

With such a system, was it wonderful that the little sufferer longed to escape from school as from a prison house—that small progress

* Extracts from "*Young's Infant School Teachers' Manual.*"

was made—and, worst of all, that the temper and disposition were too often irremediably injured? But, with the advancing intelligence of the present century, it began to be perceived and felt that something more was required for the happiness and good of infancy than this, at best, negative system; that, in fact, much could be done in the formation of character and good habits, as well as in the development of the intellectual and physical powers, even with children in the earliest stages of life: hence, infant schools, arising in an age of high intelligence, have had impressed upon them, at their commencement, enlarged and philosophical principles. Throwing aside, as unfit, all previously existing systems, the infant school legislates for its pupils in accordance with their age and state, basing its plans on the simplicity of nature; taking advantage of those restless instincts which were the terror of former teachers, it makes them subservient to the most perfect training, subduing to cheerful orderly activity that incessant restlessness, which, when suppressed, constantly breaks out into irregularities. That troublesome curiosity which so often annoys us in the young, is made to produce the rapid and apparently spontaneous development of the intellectual faculties; while the ever springing love of infancy opens the heart to receive the seeds of the purest virtue.

The following extract from an eminent Continental writer gives a fair statement of the position and use of infant schools:—

The vocation of such establishments is not to antedate the true effect of our schools, but to dispose and prepare children to enter them. Well directed, their utility is incalculable. The power of education is inversely as the age of the young; and Montaigne perhaps rightly said, that he learned more from his nurse than from all other teachers besides. Now, the teacher of an infant school carries the work of the nurse on to the age at which development really begins, and where habits are effectually formed. How many parents are there, who, for want of intelligence or leisure, of constancy and patience, are unfitted to watch over this first blossoming of our luxuriant human nature; and how desirable is it that the noble task should be intrusted to those who will regard it not as a trade, but as a profession and high art! Such institutions, too, necessarily facilitate, to a great extent, the operations of the primary schools. Instead of losing their best time, and consuming their best efforts, in bringing children within some order and discipline, in accustoming them to the school, and inducing them to fix their attention, the teacher would then only have to carry on an education already begun in every direction. In existing circumstances, and in places where there is no infant school, the teacher has reason to congratulate himself when the children committed to his care have received no education whatever, but remain very much as when they issued from the hands of nature; for then he has not to cause them to unlearn vicious habits instilled by previous maltreatment; but if good infant schools were universal, he would require only to resume the work they had begun, and to continue what already is considerably advanced. Learning to read, write, and cypher, would then not occupy all the leisure of the children; enough would remain for receiving true instruction, and for the work of education, properly so called.

I do not hesitate to state my opinion, that every primary school open to children from the age of six to fourteen, ought, in its younger classes, to be conducted and disciplined very nearly as an excellent infant school; and that in the

construction of new school-houses, attention should be paid to this special requirement.

To work, then, ye generous minds, who seek but an opportunity to accomplish services for humanity; none can be presented to you more enticing or more easy to be seized! To work, you also, who desire a greater security for your actions, who try your emotions by calculation, and consent to be charitable only when you have proved that thus also you shall be useful and just! The good now in question is in every way manifest, for the education of the people will not be truly provided for until infant schools are established every where; and the success of primary instruction itself can not fully be obtained unless through their establishment.

Arguments in favor of infant (or primary) schools are scarcely needed. Their extensive popularity and usefulness in Europe and America are the best proofs of their utility. The necessity of providing for the care of young children while their parents are engaged in their daily occupations—the importance of removing them from the moral contamination, as well as from the physical dangers, of the streets—the duty of inculcating, at the age most susceptible, pure moral and religious principles—the immense saving effected in their future education, by employing their otherwise valueless time in the acquisition of elementary knowledge—all plead for the establishment of these institutions wherever practicable.

As the passions and affections of our nature furnish the first impulses to action, it is important that we address ourselves to the task of moulding and directing them at the age at which they are most yielding and susceptible.* And as examples of good and evil are presented to the mind as soon as it is capable of intelligent observation, it is not sufficient that we ourselves set a good example, but it also becomes necessary to explain to the opening mind of the pupil the nature and tendency of the actions he may witness, or in which he participates.

The acquisition of knowledge suited to the age and state, by occupying the mind, prevents it from receiving evil, and prepares it for the reception of good. Children can not be effectively trained without the society of those of their own age. Constant and skillful treatment is required to form the character and develop the powers. Parents rarely possess the requisite knowledge, or can spare the time required for this important work, and consequently infant schools are necessary for the future welfare of the rising generation.

It must never be forgotten, that the tender age of the pupils renders constraint and severity alike unnecessary and prejudicial. The habit of study and fixed attention is of slow growth, and consequently all long continued lessons are useless and injurious. No lesson is

* A child is a being endowed with all the faculties of human nature, but none of them developed; a bud not yet opened. When the bud uncloses, every one of the leaves unfolds, not one remains behind. Such must be the process of education.—*Pestalozzi.*

good unless it is pleasing to the children. The lessons should be such as arise out of the spontaneous action of the perceptive faculties, directed by the teacher to a certain end.

The paramount importance of physical development must never be lost sight of, and a pleasant alternation of exercise and repose must be kept up.

And lastly, as the teacher stands for the time in the place of the parent, he must set a good example to his little ones, and lead them to virtue by encouraging every good impulse, and constantly watching for and repressing evil tendencies.

Moral Education.

It is more particularly for the first formation of moral character that infant schools are valuable; for, by commencing at so early an age, and before bad habits are formed, we have not only little to undo, but we have the immense advantage of making first impressions on the opening mind.

Every event in the life of a child must be made subservient to this end; nor can any of its acts be considered unimportant, since they all leave their traces on its future character. The watchful eye of the teacher must ever follow the child. It is the play-ground which first introduces it into social life; there the free play of the limbs is accompanied by an equally free development of the passions; each individual disposition stands out in bold relief, and all the hidden springs of action are revealed, thereby enabling the teacher to apply to each that mode of treatment which is best suited to its nature. No interference which is not positively necessary, should take place with the freedom of the child; but each incident requiring comment ought to be observed and stored up for future instruction in the quiet of the school-room.

The selfish principle is the great obstacle to moral training. All goes on smoothly so long as there is no *bone of contention;* for even in the merest infant we may trace almost every outbreak of the evil passions to a desire for the possession of some real or fancied advantage. To moderate this strong instinct, to teach self-denial and self-control, must be the first care of the teacher. We give the following extract on this subject from Simpson's "*Philosophy of Education:*"—

Moral education embraces both the animal and moral impulses; it regulates the former and strengthens the latter. Whenever gluttony, indelicacy, violence, cruelty, greediness, cowardice, pride, insolence, vanity, or any other mode of selfishness, shows itself in the individual under training, one and all must be repressed with the most watchful solicitude and the most skillful treatment. Repression may at first fail to be accomplished unless by severity; but the instructor, sufficiently enlightened in the faculties, will, in the first practicable moment, drop the coercive system, and awaken and appeal powerfully to the higher faculties of conscience and benevolence, and to the power of reflection. This done with

kindness, in other words, with a marked manifestation of benevolence itself, will operate with a power, the extent of which, in education, is yet to a very limited extent estimated. In the very exercise of the superior faculties the inferior are indirectly acquiring a habit of restraint and regulation; for it is morally impossible to cultivate the superior faculties without a simultaneous, though indirect, regulation of the inferior.

But in order to carry on this training without impairing the happiness of the child, every reasonable pleasure must be allowed, and above all, those simple enjoyments promoted, which, by exercising the bodily powers, encourage cheerfulness and predispose to good humor.

Every thing that can please, attract, or interest, and thereby draw away the mind from low desires, should be sought. Perfect cleanliness and order must pervade the school and play-ground. Flowers, shrubs, and simple ornaments, as shells, models, natural objects, and pictures, all afford great delight to the young, and create pleasant associations in the mind with the idea of school. The aim of making school agreeable should pervade every arrangement. Unless the children love the teacher, the school, their lessons, and their companions, they will not be happy; and love, like every feeling, must have a cause.

But besides that kind of moral training which arises out of the actions and events of the day, another important mode is open to us. Children are universally fond of *office*, and it is both reward and excellent training to employ them in regular duties. The trust thus reposed, elevates and strengthens the character, and even the faults arising from an abuse of trust give rise to excellent opportunities for explaining and confirming moral principles. On these grounds, various offices are created amongst the children, which are frequently transferred from one to another, so as to try the character of each. It will also be found that different children are fitted for different duties, and thus the waste energies of all can be made useful. For instance, a very restless and active child will make a good monitor of order. Some children from their love of order are happy when employed in keeping the school neat and putting every thing in its place. Others delight to guide and assist the very little children, and are pleased when one is committed to their care. Some, from their steadiness of character, may be intrusted with the books, clothes and bread, of their respective classes, while the busy intellects can be employed to teach simple lessons to the little ones.

To carry out the training of the child it is necessary that parents and teachers should act in concert. It is comparatively of little use for the teacher to pursue one system at school, whilst a counteracting one is going on at home. This latter must be changed.

This is plainly the teacher's duty, as well as to keep up a friendly relation with the parents generally, by which means the ideas of school and home will become connected, and the child prevented from assuming two characters, which is too often the case. Both school and home will benefit by this mutual influence, and a greater consistency of conduct be obtained. A child who has been visited in sickness by its teacher will never forget the kindness, and I have known more improvement arise in the conduct and studies of some children, from having called at their homes, and spoken of them in an encouraging, hopeful manner, than by any other means; while in all cases the home influence is the most useful and natural auxiliary on which the teacher has to rely.

As an inseparable adjunct of moral training, outward amenity and delicacy of demeanor must be carefully cultivated. Coarseness, vulgarity, and rudeness, debase and brutalize; while refinement of manner and consideration for the feeling and comfort of others, not only render the intercourse of life delightful, but promote internal purity and elevation of feeling. It is plain that one means of improving the manners of the children, is for the teacher to show an example of gentleness and propriety, which will be insensibly imitated by them. But this is not entirely sufficient; errors and habits must be corrected in individual cases, and, when general, made the subject of lessons to the whole school. No more should be said to the children on these subjects than is actually necessary, as frequently remarking their behavior will make them nervous and unnatural. A good tone of manners once established can be kept up quietly without calling much attention to it. Consider that personal habits are generally acquired more *by habit* than by direct teaching. Cleanliness, for instance, is (as far as the child is concerned) easily acquired, if care be taken to notice a child when clean with approval, and gently to admonish it for any willful neglect, in unnecessarily soiling either its person or its clothes.

Obedience to the teacher's commands must of course be secured, but, as a general principle, it should be a willing obedience. To obtain this, the teacher must first gain the affections of the child, and take care to require only what is just and reasonable.

Truth.—Infants have at first very vague notions about truth and falsehood, and we must be careful not to attribute the wanderings of the imagination, or the momentary effects of timidity, to deliberate intention. We have often known children indulge in a kind of romance, and tell long histories, as if true, which never occurred, without being aware they were doing wrong until it was pointed out to them. *Fear*

also is so very likely to lead to concealment that every inducement to candor should be held out, and when a little child once *confesses* a fault, it is questionable whether punishment should ever be inflicted.

Gentleness.—The exciting causes being as much as possible removed, outbreaks of anger will diminish, and the passion come under control. When *rights* are clearly defined and rules for the conduct of each established, quarrels will no longer be frequent; and as every case of wrong or injury is investigated, and just judgment given, a positive check will be put to such occurrences, and a gentleness of manner be induced.

Generosity.—Every thing that is ungenerous, such as a disposition to report and magnify the faults of others, or to depreciate them and to exalt self, must be discouraged, and a liberal, generous spirit cultivated and encouraged; for by this alone can the intercourse of the children be rendered happy.

Ridicule.—Children are so keenly sensible to ridicule, that the worst effects would flow from allowing them to deride each other, and the disposition to do so should be carefully repressed.

Pride.—In our anxious endeavors to encourage virtue or merit of any kind, we must be careful not to nourish pride. Children should be encouraged as far as possible to learn for learning's sake, to deny themselves for virtue's sake, and always to act from a sense of duty. The dangerous stimulus of public reward or praise should be administered with care; and above all things, the teacher must avoid making *show-children*, either for talent or virtue. To do so is often the greatest injury to those whom we think to benefit. For this reason also, offices of trust ought not to be confined too exclusively to a small number of children, however meritorious, as they will come to look down on the less favored, and believe themselves superior in nature and abilities; even to confine singing, drawing, or any accomplishment to a small class is often an injury to them. If possible, every one should have the same chance of learning; there will still always be difference enough arising from unequal natural abilities.

Tyranny and exclusiveness.—A few individuals in a school will generally try to tyrannize over the rest, and to monopolize the amusements which should be common to all. The remedy is very simple. Rules securing freedom and justice to all must be made, and strictly enforced, and, when necessary, lessons given explaining the evil tendency of such faults.

Cruelty to animals, and destructiveness.—Many children seem to delight in destroying insects, and ill-treating animals; and this habit, if allowed to strengthen, would undoubtedly lead to an unamiable

disposition, and should be counteracted by proper lessons explaining the suffering they cause to animals, and the wrong they commit by ill-treating them. With regard also to inanimate objects, a careful, conservative spirit should be inculcated, which is best done by giving them an interest in, and teaching them to examine and admire works of art and natural objects.

Mutual love and benevolence.—Every opportunity should be sought for cultivating the higher feelings. The elder children should be taught to succor and assist the younger ones. When a child is hurt, or ill, or in any trouble, the teachers should hasten to set an example of kindness, by doing all in their power for its comfort and relief. Anecdotes and histories illustrative of kindness may also be frequently related in the gallery with a similar view.

Courage.—Many children are timid from constitutional causes, others are rendered so by injudicious treatment at home, while some have vague terrors at sight of some particular object, or in the dark, &c., &c. From whatever cause fear arises, it should be counteracted by kind and judicious reasoning, and by encouraging the child to overcome its terrors. The mere association of many children together has a tendency to give to each a degree of fortitude and self-support.

Intellectual Education.

"I began with children," says Pestalozzi, "as nature does with savages, first bringing an image before their eyes, and then seeking a word to express the perception to which it gives rise."

This appears to be the true way to commence, since our ideas are first derived from nature; and as books merely represent this knowledge, it is plain that they instruct us only as far as we are able to connect the words they contain with the ideas those words represent.

We must begin by teaching real sounds, real forms, real colors, and real things. Before we use the word purple, we must distinctly impress upon the eye the color purple. If we would speak of a thing being square, we must take care first to impart the true notion of the form; and, when using the words rough or smooth, we should have previously made the mind acquainted with those sensations. The more we spread and enlarge these roots of knowledge, the more rapidly the future tree will grow, and the more vigorous will be the fructification. A child thoroughly drilled in real arithmetic by counting and arranging objects, will carry clearness and vigor into the artificial processes of figures; while a thorough comprehension of the qualities of common things will enable the learner to understand the

descriptions met with in history and geography, in a manner impossible without this elementary knowledge.

The spirit in which intellectual instruction should be carried on is of so much importance, that we are tempted to give the following clear and enlightened passage from Pestalozzi :—

The interest in study is the first thing which a teacher should endeavor to excite, and keep alive. There are scarcely any circumstances in which a want of application in children does not proceed from a want of interest; and there are perhaps none under which a want of interest does not originate in the mode of teaching adopted. I would go so far as to lay it down as a rule, that whenever children are inattentive, and apparently take no interest in a lesson, the teacher should always look to himself for the reason. When a quantity of dry matter is before a child, when a child is doomed to listen to lengthy explanations, or to go through exercises which have nothing in themselves to relieve and attract the mind, this is a tax upon the spirits which a teacher should make it a point to abstain from imposing. In the same manner, if the child, from the imperfection of his reasoning powers, or his non-acquaintance with facts, is unable to enter into the sense, or follow the chain of ideas in a lesson; when he is made to hear or to repeat what to him is but "sound without sense," this is perfectly absurd. And when to all this the fear of punishment is added, besides the tedium which in itself is punishment enough, it becomes absolute cruelty.

The first thing to be considered then is—how to create an interest in study, so as to cause the mind to receive and retain the necessary information. Knowledge may be divided into—first, that derived from the involuntary action of the senses, impressed by some outward object or event, which by its novelty or interest makes a distinct and permanent impression on the mind; and secondly, such as is obtained designedly by compelling the attention of the perceptive and reasoning powers to some subjects with which we wish to become acquainted. The first merely wants to be directed to become a fruitful source of improvement, but no child will adopt the second without some motive. It is of the highest importance to determine what that motive is to arise from. Two stimulants were much in vogue in the old system, *fear* and *ambition;* fear of the rod; and ambition to be considered clever, with a mingling of envy of the more gifted.

But will not *love* do more than fear? Will not the desire to acquire knowledge for its own sake, once awakened, do more than the wish to excel others? The answer is not difficult; and the choice once made, minor details will follow.

Mr. Wilderspin thus states his views of intellectual education :—

The error of the past system (for such I hope I may venture to call it) as to mental development was, that the inferior powers of the mind were called into activity, in preference to its higher faculties. The effort was to exercise the memory, and store it with information which, owing to the inactivity of the understanding and the judgment, was seldom or never of use. To adopt the opinions of others was thought quite enough, without the child being troubled to think for itself, and to form an opinion of its own. But this is not as it should be. Such a system is neither likely to produce great nor wise men, and is much better adapted to parrots than to children. Hence the first thing attempted in an infant school is, to set the children thinking—to induce them to examine, compare, and

judge, in reference to all those matters which their dawning intellects are capable of mastering. It is of no use to tell a child in the first place, *what it should think*,—this is at once inducing mental indolence, which is but too generally prevalent among adults, owing to this erroneous method having been adopted by those who had the charge of their early years. Were a child left to its own recources, to discover and judge of things exclusively by itself, though the opposite evil would be the consequence, namely, a state of comparative ignorance, yet I am doubtful whether it would be greater or more lamentable than that issuing from the injudicious system of giving children dogmas instead of problems, the opinions of others instead of eliciting their own. In the one case we should find a mind uninformed and uncultivated, but of a vigorous and masculine character, grasping the little knowledge it possessed with the power and right of a conqueror; in the other a memory occupied by a useless heap of notions,—without a single opinion or idea it could call its own,—and an understanding indolent and narrow, and from long indulged inactivity, almost incapable of exertion. As the fundamental principle of the system, I would therefore say, let the children think for themselves. If they arrive at erroneous conclusions, assist them in attaining the truth; but let them with such assistance arrive at it by their own exertions. Little good will be done if you say to a child,—*that is wrong*, *this is right*, unless you enable it to perceive the error of the one and the truth of the other. It is not only due to the child as a rational being that you should act so, but it is essentially necessary for the development of its intellectual faculties. It were not more ridiculous for a master in teaching arithmetic to give his pupil the problem and answer, without instructing him in the method of working the question, than it is for a person to give a child the result of reasoning, without showing how the truth is to be arrived at.

It will often happen that the mind of a child remains dull and inert, without any apparent cause; in most cases this arises from our not having discovered the peculiar taste or bias of the individual. While we are knocking at the outer gate, and groping in the dark, the mind is asleep within, and will not awaken until we can establish some means of communication; but once aroused, it is all bustle and activity.

It must be the constant care of the teacher to bring forth the latent powers of each pupil, and to allow to each the credit due to his efforts, although these may not in all cases be equally successful. For this reason the classification of the children should be made with reference to each separate subject. How absurd would it be to prevent a pupil from progressing in arithmetic, for which he may have a peculiar talent, because he is not quick in learning to read; or not to allow him to extend his knowledge of geography, because he is not a good arithmetician! Rather let us encourage the development of peculiar talents in each individual, thereby to give to all the consciousness of successful progress; and the self-respect arising from this feeling, will impart energy and motive to grapple with those studies which are difficult.

Nothing is of more importance than to watch the progress of the pupils, and remove them from class to class, as soon as they are fit. The child who is not advanced in proper time will retrograde. The spirit of learning flags when allowed to stand still, and it is often

difficult to recommence the onward movement. The subjects placed before each class should come in a natural order and succession, according to the previous advances of the mind.

The first efforts should be directed to the most simple perceptions. The blending of manual exercises and singing with the earlier lessons, deprives them of their dry character, and assists to keep up the attention, by bringing them to the level of the infant mind. The repetition of very simple rhymes, accompanied by amusing exercises, and rendered instructive by simple explanations, is also of great use in these first stages of instruction.

Whatever is useful and necessary to man, possesses an interest for the child. It wants to know about the food it eats—the house it lives in—the uses of each article of furniture—of tools men use—about its clothes—who makes them, and how—what they are made of—of its own body—of every thing relative to man, as well as the habits and economy of animals and plants; in fact, its curiosity is insatiable, because a knowledge of these things is necessary to its existence and well-being. It is evident that by taking advantage of this propensity, while only gratifying a natural impulse, an immense amount of information may be imparted, and at the same time the perception and the judgment cultivated.

Modes of Intellectual Instruction.

The different modes of intellectual instruction may be divided into—

1st. Intuitive teaching, by which the senses and perceptive faculties are trained, and the mind stored with a knowledge of surrounding things. This in an infant school is the first and most important mode.

2d. By Comparison—as when you exhibit two objects or pictures, and lead the pupil to observe the differences between them and guess at their causes.

3d. By Pictures and verbal descriptions—which depends for its success on the first having preceded it.

4th. By Questioning—which is chiefly valuable as it leads the mind of the learner to form conclusions of its own; or when, by questions put to the teacher, the pupil seeks to supply imperfections in his own conception of the subject.

5th. By Ellipses—a most valuable method of securing attention to any historical or descriptive lesson. It consists in interrupting the sense of a passage by omitting some necessary part, and leaving the pupil to discover from the foregone sense the suppressed word or phrase.

6th. By Imitation—as in writing, drawing, music, &c. To these

may be added exercises of the memory, as recitation and spelling. We do not mean that these various modes are always to be separately employed; on the contrary, some of them are generally combined with advantage; we only point out the distinct nature of each.

Intuitive teaching embraces all our perceptions of the external world through the senses, as form, number, size, position, motion, texture, color, sound in all its varieties, taste, odor, temperature and resistance. These qualities occurring in varied combinations in nature, it is the teacher's business to separate and present them in a simple, striking manner, so that the pupil may get a clear notion of the nature of each, and be able to trace its existence wherever it occurs, or to understand what is meant when the term expressing it is mentioned. But in imparting this knowledge, frequent recourse to *comparison* is necessary. In colors, for instance, shades of the same color become more evident when compared; differences of weight are more clearly perceived by the same means, as well as degrees of light and sound. Opposite qualities are also rendered more palpable by contrast, as transparent and opaque—solid and fluid.

It is plain that, without this preliminary knowledge, no description can be understood. We may, indeed leave its acquisition to chance and casual observation, but this will take too long for the purposes of education, and after all, will be a most imperfect process. It is better to overcome the difficulty at once by supplying systematically those elements upon which the future education is based. Second only to this direct knowledge of things present, are the notions derived from models and pictures. This is the first extension upwards of the previous foundation, and prepares the mind to receive and comprehend history and description.

Reading and the analysis of words become, from the first, an exercise of the reasoning powers, and should therefore be taught gradually and with care. If a judicious system is followed, the art of reading should be acquired without painful difficulty or overstraining the mind; it is, indeed, often forced on too fast, and then becomes mere parrot-work; the interest in reading will infallibly cease if what is read be not thoroughly understood.

The natural history of living things is exceedingly interesting to children when taught in a manner suited to their age, that is, with full illustration by pictures and by description.

Every thing must be first taught as a whole, without regard to niceties of structure: if an animal, its general form, color, size, motion, habits, &c.: and less striking points may be afterwards brought out by contrasting it with other species.

Geography, treating as it does of such vast subjects, should be very gradually approached. Ideas of time and space arise but very slowly in the mind; and it is only by carefully extending these conceptions that any approach to a just notion of the surface of the earth can be given. It is best to combine natural history and descriptions of the manners and customs of nations, with geographical teaching, so that, from the first, ideas of real things may be associated with names of places, otherwise unmeaning.

Narrative is always delightful to children, and may be introduced as the judgment of the teacher directs, to secure attention to the subject, whether moral or intellectual.

The education of the hand and eye in drawing, and of the ear in singing, not only cultivates the taste and refines the feelings, but also affords a pleasing variety of occupation and a relief from more intellectual studies.

The recitation of simple poetry, while it cultivates the memory, also serves a most important purpose in imparting a correct and pleasing pronunciation. As the first difficulties of reading tend to embarrass and retard speech, some counteracting process is required, and none is so pleasing to the child as repeating rhymes.

The arrangement of these several subjects in such order as shall give to all their due share of attention, and, at the same time, by their judicious alternation, produce the least fatigue to the learner, should be carefully studied by the teacher. Rest, both to men and infants, is often only another name for change of occupation; and it is possible, by a proper management of school business, greatly to lighten the labor of each successive study.

In concluding this subject, we beg to call attention to the following "Hints to Teachers," by an eminent authority, which we have found by long experience to be most useful and important.

Hints to Teachers.

The best mode of teaching any science may mean—

1—The best for the teacher's ease; (such as the books in "question and answer," which the learner is set to get by heart; for him the books are ill adapted, but they are good for the writer and bookseller because they sell; and for the master because they save him trouble.)

2—The best to make the pupil show off at a made-up examination.

3—The best for grounding him speedily and soundly in the science.

All teachers question their pupils, if there is even any attempt or pretense of advancing them properly.

Questioning is of three kinds—

1. Preliminary [or preparatory]* questioning (relates to the future.)
2. Instructive questioning (to the present.)
3. And examination questioning (to the past.)

All three very few persons employ designedly: the last two are used by all who at all deserve the name of good teachers: the third alone is employed by probably the majority.

1. The first consists in asking (orally or on paper) questions relative to what the pupil is about to learn, to try what notions or guesses he may form on each point.

This is an increase of trouble to the teacher, and, in the outset, taxes the efforts of the pupil by compelling him to think. In the end it will be found that he has learned much more rapidly and with more interest, more correctly and more permanently.

This mode is seldom employed designedly; but a man often finds how advantageously he has employed it for himself by accident; when he has learned a subject, for instance, by sitting down to write a book upon it.

If the teacher will have the courage to use this method systematically, by every day putting before his pupils questions relative to what they are next to learn, he will find himself doing wonders.

2. The second consists in asking questions as to the lessons actually before the pupils, to see how far they understand each passage, and can state it in their own words.

3. The third consists in examining them as to what they *have* learned, to try how well they retain it.

These three processes have been compared to the plowing, the sowing, and the harrowing of a field.

N. B.—You will judge from what has been said, what is the best and what the second best mode of advancing your pupils.

N. B.—You should frame examples for them and teach them to do so themselves.

It is not necessary that they should remember quite perfectly and rapidly each lesson before proceeding to the next; but they should clearly *understand* as they go on; and they should not advance far a-head of what they have perfectly learned. In particular, the technical terms and definitions should be as familiarly known as the alphabet; for technical language is an incumbrance to those not quite familiar with it, and a great help to those who are.

* Please to observe that the square [brackets] as distinguished from the common (parenthesis) denote a word or phrase equivalent to one before; and are used to guard the learner against mistaking it for a different thing. It is thus I should speak in geometry of "Trilatera figures," [or "Triangles."]

Physical Education.

All children require sound sleep, regular and wholesome meals, cleanliness, warmth, light, fresh air, and frequent exercise.

Mr. Wilderspin observes—"An inactive and healthy child under six years of age is never seen. * * * Children must exert all their muscular force, and employ all their ingenuity, in order to gratify their curiosity, and satisfy their little appetites. What they desire is only to be obtained at the cost of labor, patience, and many disappointments. By the exercise of body and mind necessary for satisfying their desires, they acquire agility, strength, and dexterity in their motions, as well as constitutional health and vigor; they learn to bear pain without dejection, and disappointment without despondency."

In winter time it is necessary to induce the children to exert themselves, by joining in and promoting their games; and when in the gallery on cold days, their lessons must be interrupted by vigorous manual exercises, to restore the animal heat, and with it cheerfulness and attention; while in summer it is equally important to promote quiet amusements, which do not heat or exhaust the children.

Every school-room should be well lighted, and the means of free ventilation provided. But this alone is not sufficient; relaxation in the open air is also necessary to health, for if kept constantly in the school-room, infants will not remain healthy.

The general rule for infants is, short lessons and frequent exercise. Overstraining the attention and intellectual powers, would infallibly injure the health of the child.

II. QUALIFICATIONS OF THE TEACHER.

"He, whene'er he taught,
Put so much of his heart into his act,
That his example had a magnet's force,
And all were swift to follow whom all loved."

The person who undertakes the charge of an infant school should be prepared to undergo much labor and anxiety, and to meet with many difficulties. On the other hand, it is a work full of interest, and yielding peculiar pleasures to those engaged in it. The dispositions necessary for success are kindness, gentleness, and patience towards the children, steadiness of temper, a habit of observation, cheerfulness and activity. To the usual branches of education the teacher of infants should add a knowledge of the elements of music, drawing, natural history, and as much general information as possible. The habit of study and observation must always be kept up, whether

in the fields, in the town, or at home; a good teacher is always observing and storing up facts for future lessons, by which to attract the attention and inform the minds of his pupils.

Speaking of the first transfer of the children from the mother's care to that of the teacher, Pestalozzi says:—

It will therefore become possible even for a stranger, and one who is a stranger also to the mother, by a certain mode of conduct, to gain the affection and confidence of the child. To obtain them, the first requisite is constancy in the general conduct. It would appear scarcely credible, but it is strictly true, that children are not blind to, and that some children resent, the slightest deviation, for instance, from truth. In like manner, bad temper, once indulged, may go a great way to alienate the affection of the child, which can never be gained a second time by flatteries.

This fact is truly astonishing; and it may also be quoted as evidence of the statement, that there is in the infant a pure sense of the true and the right, which struggles against the constant temptation arising from the weakness of human nature, and its tendency to falsehood and depravity.

In the following passage Mr. Wilderspin points out the error of employing incompetent teachers:—

It is indeed a melancholy truth, that moral training is yet to a very limited extent estimated; and this is mainly owing to its not being understood by the generality of those selected for the office of teachers of infants; nor can it be expected that persons of sufficient intellect and talent to comprehend and carry out this great object can be procured, until a sufficient remuneration is held out to them to make it worth their while to devote their whole energies to the subject. It is a fatal error to suppose that mere girls, taken perhaps from some laborious occupation, and whose sum total of education consists of reading and writing, can carry out views which it requires a philosophical mind, well stored with liberal ideas and general knowledge, to effect. They may be able to instruct the children in the mere mechanical parts of the system; and as long as they confine themselves to this, they will go on capitally; but no farther than this can they go; and though the children may appear to a casual visitor to be very nicely instructed, and very wonderful little creatures, on a closer examination they will be found mere automatons; and then, perhaps without a further thought on the subject, the system will be blamed, not considering that the most perfect piece of mechanism will not work properly in any hands except those who thoroughly understand it.

We must however take this with some qualifications, and not despair of success even with ordinary teachers; for daily experience proves that most persons by devoting their minds steadily to one subject, can attain to a certain proficiency, and this special study will enable a sufficient number to qualify themselves, whose views in life may lead them to devote themselves to the work. But in order to do so, they must at least know what they aim at, and this they can not do without a proper training in some well conducted model school. Perhaps it is more important that the infant school teacher should have received a regular course of training than any other. The plans are such as are not likely to be *guessed* at: when known, they present no insuperable difficulty, but it is necessary that they should be learned to be successfully practiced.

III. SCHOOL RULES AND REGULATIONS.

Good rules are as important for a school as good laws for a country; neither the one or the other will go on well without them. The rules for parents may be printed, and distributed to them when they enter their children. The rules for the internal management of the school should be explained to the children at stated periods.

RULES FOR PARENTS.

Parents are requested to observe the following rules:—

1. Parents wishing their children to be admitted must apply on any morning of the week, *except Monday*. The names, residences, &c., of the children will then be registered in a book kept for the purpose, and as vacancies occur, they will be sent for in the strict order of their respective applications—*except in the case of pupils who have been dismissed for irregularity of attendance, who are not to be received again till after all the other applicants shall have been admitted.*

2. No child can be admitted who is under two, or more than seven years of age.

3. The doors are closed every morning precisely at ten o'clock, and the children are dismissed at three, except on Saturdays, when the school closes at twelve o'clock.

4. If any child be frequently absent, or absent five days successively, and the cause be not made known to the teacher before the expiration of the five days, such child will be discharged from the school. If the parents wish the child to be readmitted, they must get the name entered in the application book as at first, and wait till after all the children who have applied for the first time shall have been admitted.

5. The payment is ——— per week, to be paid the first day in each week the child attends; and should any child be unavoidably absent, payment must nevertheless be made weekly so long as the parent wishes the name of the child to remain on the roll.

6. No child having any infectious disease, or who is deficient in personal cleanliness, can be admitted or retained in the school.

MAXIMS AND REGULATIONS TO BE OBSERVED BY THE TEACHER.

1. Endeavor to set a good example in all things.

2. Never overlook a fault: to do so is unjust to the children, since you will, no doubt, soon have to correct them for a repetition of it.

3. Spare no pains to investigate the truth of every charge; and, if you can not satisfy yourself, make no decision. Leave it to the future to develop.

4. Never correct a child in anger. It rarely happens that we know the truth of a case without investigation.

5. Do strict justice to all, and avoid favoritism.

6. Always prepare for your gallery lessons by previous study; never attempt to teach what you do not know thoroughly; and if at any time you are unable to answer a question put by the children, acknowledge your inability.

7. Try to bring forward the dull and backward children. The quick intellects will come on without your notice.

8. Teach *thoroughly*, and do not try to get on too fast; remember that you are laying the *foundations* of knowledge.

9. Never leave the children alone, either in the school-room or play-ground.

10. Attend strictly to the personal cleanliness of the children; and watch against the entrance of disease.

11. Let particular care be taken of the pictures, books, and apparatus, and see that all is kept in working order.

12. Attend to the cleanliness and neatness of the school-rooms and offices, and to the order and neatness of the play-ground and garden borders.

13. Attend to the ventilation and heating of the rooms. In summer keep the windows constantly open, in winter open them when the children go out to play.

14. Never let the children get chilled or overheated.

15. Do not be tempted to give undue attention to the elder, to the neglect of the younger classes. Such a course would be fatal to the general advancement of the school.

16. Take every opportunity of moral training. Consider that it is better to make children *good* than *clever*.

17. Constantly seek self-improvement, and try to enlarge your own stock of information. Remember that *knowledge is your stock in trade*.

18. Let your intercourse with the children be regulated by *love*. Remember that our blessed Lord loved little children, and took them in his arms and blessed them.

SCHOOL-ROOM RULES, TO BE REPEATED BY THE CHILDREN AT THE CLOSE OF THE WEEK.

1. We ought to be kind and gentle in our conduct towards each other, and, when injured in any way, not to revenge ourselves, but seek the protection of the teacher.

2. Always to speak the truth without reserve.

3. Never to speak evil of others.

5. Never to take any thing which is not our own, nor keep any thing we may find belonging to another.

5. Never to covet any thing other children have, nor try to deprive them of it.

6. To obey the teachers in all things, and pay strict attention to their words.

7. To keep silence when in the gallery, except when permitted to speak, and never interrupt either the teacher or any other person who may be speaking.

8. To be strictly attentive to lessons at all times, and always seek an explanation of what we may not understand.

9. To keep our books whole and clean, and never to touch or injure the pictures or apparatus.

10. To come in time in the morning, and with clean hands, face, and clothes.

PLAY-GROUND RULES.

4. To be gentle in play, and careful not to hurt the very little children.

2. Not to be selfish or exclusive in play, but to endeavor to make others happy, as well as ourselves.

3. Never to interfere with or interrupt other children's amusements.

4. Always to try and comfort and assist any one who is hurt or in trouble.

5. To refer every cause of complaint to the teacher.

6. Not to touch or injure the flowers, nor to tread on the garden borders.

7. Each class to use the swings (or other gymnastics) in turn, as appointed.

8. Never to go in the way of the swings, nor interfere with others who may be using them.

9. To form quickly in line when the bell rings for lessons.

Sanitary Regulations.

VENTILATION.

Children breathe more quickly by about one-third than grown persons. A child under seven years of age will render impure nearly three cubic feet of air in a minute. Now if we take as an example a school-room forty feet long, twenty wide, and fourteen high, and say that there are one hundred infants in it at one time, it will give (allowing for the space occupied by gallery, furniture, &c.) about one hundred cubic feet of air for each pupil, and if there were no ventilation this stock would be exhausted in thirty-three minutes; but long before this limit is reached, the air of the room becomes unwholesome, the oxygen or life-supporting part of it being absorbed into the blood, and a deleterious gas (carbonic acid) returned in its stead; if means are not taken to remove this, and admit pure air, the children will become languid and dispirited, and their health will suffer. An air shaft, with an opening near the top of the room, having a sliding lid that can be raised or let down, is a simple and effectual mode of ventilation. Where no other means occur, the top sashes of the windows should be kept down a little, to allow the heated air to escape as it ascends.

CLEANLINESS.

Cleanliness is next in importance to ventilation: for, independently of the unpleasant and demoralizing character of a dirty school-room, the dust raised by so many feet, when taken into the lungs, is highly injurious.

TEMPERATURE.

When the room is heated by an open fire-place, it is well to admit the air for ventilation as near the fire as possible, as by that means a more equal warmth is kept up. It is dangerous to overheat the school-room, as it causes the children to take cold when changing to the play-ground: the temperature should not rise above 70° or fall much below 60° Fahrenheit.

DISEASE.

Although it is the parents' duty to attend to the health of the child, yet in epidemics or sudden illness, it is necessary for the teacher to be able to distinguish the premonitory signs of disease, as he stands for the time in the parents' place.

The following diseases may with certainty be considered as infectious:—Measles, scarletina, mumps, small-pox, and hooping-cough.

The symptoms of measles are sneezing, running from the eyes and nostrils, sickness, cough, together with heat of the skin and quick pulse.

The approach of scarletina is known by alternate shivering and heat, quick pulse, sickness, white tongue; and later, by red spots or patches on the face, neck, and chest.

Mumps are known by painful swellings above the sides of the throat, on a level with the ear.

Hooping-cough comes on like a common cold, but with violent cough, in which a watery fluid is expectorated; watery discharges from the eyes and nostrils; hoarseness and sneezing. The child is generally languid and out of spirits. When much advanced, the symptoms of this disease are so evident as not to require description.

A well-regulated school tends to preserve and improve the health of those attending it, but it is evidently necessary to return to the care of its parents any child who exhibits signs of sickness or disease. Even in case of common diarrhea the child should be immediately sent home.

In inspecting the children for cleanliness, the *head* should be particularly observed; and if there is any appearance of ring-worm or scald-head, the child should be kept at home until the disease has entirely disappeared, as both are infectious and troublesome, as are most cutaneous diseases.

ACCIDENTS.

Accidents rarely occur in a well-regulated school: but as there is a possibility of such things happening, where so many children are collected together, we give a few simple directions for treatment.

In case of a bruise or wound from a fall or other cause, the part should be washed clean, and a piece of old linen or lint dipped in cold water applied.

Sprains require the limb to be kept quite still, and bathed with vinegar and water.*

In case of a cut from any sharp instrument, slate or glass, bring the edges of the cut carefully together and apply a slip of common adhesive plaster.

Should so unfortunate a circumstance happen as that of a child falling into a fit from disease or constitutional causes, the children of the school should not be allowed to witness the painful sight, but the sufferer should be removed from the room, and exposed to the fresh air, with the clothes loosened. No restraint should be used in the convulsion, except to prevent the patient from injuring himself.

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* His Grace the Archbishop of Dublin has kindly communicated to us the following note:—

"Tincture of arnica is now to be had at any chemist's. For a bruise or strain (when the skin is not broken) six drops to a table-spoonful of water (five for the wound when the skin is broken), make the lotion. A rag wetted with the lotion, and kept wet, to be kept on the place. There is nothing at all comparable to it for all hurts; but the bottle of tincture should be marked 'poison.'"

In conclusion, we may remark that children liable to fits, defective in sight or hearing, or affected in any other way which would require *special* attention from the teacher, should not be in a common school, the ordinary duties of which are arduous enough, without this additional perplexity.

The Play-ground.

With regard to recreation in the play-ground, let it be as unre strained as possible; nature is the best gymnastic teacher, and little can be done to assist her. Whatever apparatus is introduced should be very simple, as scarcely any is free from danger. A dry floor under foot, a free circulation of air, and a constant gentle superintendence, which, by affording protection to the weak or injured, secures the greatest amount of liberty to each, are the chief requisites; and any one who has witnessed a well-regulated infants' play-ground, must be aware how perfectly the happiness of the assembled group is secured. If we come to inquire into the causes, we shall find that freedom and the gratification of the craving for sympathy and society are the chief. In the large number assembled together, each finds companions whose age and taste suit its own; peculiarities of character find free play. Some naturally take the place of *leaders*, while others are content to serve. If any one wishes to be an architect, he will soon find plenty of builders at his command. Perhaps another is a rider, and he easily persuades some one to be horse; or, if he likes to drive, he may have a whole team! In one place you may see a little knot of exclusives, who would not for the world admit another member to their club; while close by is a laughing face which has formed a dozen associations in the hour! Here the imitative faculty develops itself in a mimic school, including a very fair copy of the teacher (*peculiarities* and all) from which, if he be wise, he may take a lesson in turn. It is true that, in the first formation of the school, many of these different elements will come in collision, but constant moral training will teach them to associate together in harmony and love, and we repeat, *the less interference the better.*

No play-ground should be without a border of flowers, and, if possible, fruit trees. The moral discipline afforded by teaching the little ones to respect these things, is not their only use; they give pleasure to the senses and cultivate a love of nature. The gymnastic apparatus should be carefully watched to avoid accident, and the proper mode of using it be taught to the children.

Time Table.

The time table should be so arranged as to bring those lessons which require mental effort as distant from each other as possible, and to secure frequent relaxation in the play-ground. Those subjects

which require special attention should be introduced at the commencement of the day, before the mind is wearied or preoccupied. The general time table is as follows:*—

DAILY TIME TABLE.

Nine o'clock: school doors opened; teacher in attendance; the children, as they arrive, deposit their clothes and bread in the baskets which are placed at the respective class posts, and proceed to the play-ground. Where there is a monitor's class, it is taught at this hour.

Ten o'clock: children assembled in galleries for morning lesson.

Half-past ten: reading, the elder children in classes, the younger in galleries.

Half-past eleven: march to play-ground for recreation.

Twelve o'clock: writing lesson.

Twenty minutes past twelve: drawing.

Twenty minutes to one: march to gallery for midday lesson.

Ten minutes past one: lunch hour.

Thirty minutes past one: dismissed to play-ground.

Two o'clock: in gallery for afternoon lesson, or in circulating classes for picture or object lessons.

Three o'clock: school dismissed.

Synopsis of a Week's Lessons for the Elder Classes.

The object of the following arrangement is to secure, first, the recurrence of each subject at certain intervals; and secondly, to indicate the manner in which its several parts should be taken up in successive lessons, so as to avoid a desultory and confused method of teaching on the one hand, or the neglect of any material point on the other.

MONDAY.

Morning Lesson.—Arithmetic, enumeration of real objects, the ball-frame, notation with blackboard.

Reading.†—Preliminary questions on the subject of the lesson, with explanations. Teacher then reads a portion of the lesson, with remarks upon punctuation, and tone of voice. Children read, classify words in first sentences. Spelling.

Midday Lesson.—Geography, Map of the World, first outlines—cardinal points—circles—climates—division of time and seasons.

Afternoon Lesson.—Developing lesson—form, lines, and plane figures, with illustrations from objects. Teacher draws on blackboard simple outlines, children analyze them. Song, "Geometrical lines."

TUESDAY.

Morning Lesson.—Singing exercises on tone and time, concluding with a song.

Reading.—Children read, questions on the meanings of words, substitution of words, parts of speech, spelling.

Midday Lesson.—Arithmetic, addition and subtraction, with ball-frame and blackboard.

Afternoon Lesson.—Geography, division of land, continents, islands, peninsulas, countries. Song, "The solid earth."

WEDNESDAY.

Morning Lesson.—Developing lesson, color, texture of surfaces, structure, (as laminar, fibrous, &c.)

Reading.—Children read, teacher then reads with ellipses, requiring the children to complete the sense. Questions on the time of verbs, number and gender of nouns, and comparison of adjectives. Spelling.

Midday Lesson.—Singing. Teacher sings the melody to be learned twice or oftener to the children, explains the style and time, then the children sing it with the teacher.

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* In Ireland the general school hours are from ten until three o'clock, while in England the children attend twice in the day; in the morning from nine until twelve, and, in the afternoon, from two until four or five o'clock.

† The reading classes come up twice, first to read, and then they return to their seats to look over the lesson again for questions and spelling; otherwise the lesson would be too fatiguing. When the subject of the lesson is sacred history, it should not be made the basis of any grammatical teaching.

Afternoon Lesson.—Picture lessons. The monitors should have been well trained previously. The classes must move exactly at the appointed time, and the teacher go from class to class, assisting and directing, so as a keep up the spirit of the lesson.

THURSDAY.

Morning Lesson.—Geography. Divisions of water, oceans, seas, gulfs, lakes, rivers, with explanations of each term.
Reading.—Teacher reads slowly, purposely making errors in punctuation, &c., requiring the children to look on their books and correct them. Children read; classification of words. Spelling.
Midday Lesson.—Developing lesson. Weight, with illustrations of mechanical powers.
Afternoon Lesson.—Arithmetic. Multiplciation and division, with ball-frame and blackboard.

FRIDAY.

Morning Lesson.—Singing. Children sing; teacher listens, corrects, and instructs; gives explanations of the words of the song.
Reading.—Children read, and ask the teacher questions on the subject, and meanings of words. Spelling.
Midday Lesson.—Arithmetic. Mental arithmetic and illustrations of fractional parts by drawing on the blackboard.
Afternoon Lesson.—Natural history of animals and plants, with pictures.

SATURDAY.

Morning Lesson.—Geography. Capital cities, national characteristics and exports
Second Lesson.—Singing. Recapitulation of songs of the week.

The foregoing is only given as a specimen, as each teacher should arrange his own work in accordance with the circumstances of his particular school. It will be seen that no place is given above for religious instruction, as that must entirely depend upon local arrangements; but, as a general principle, the commencement or close of the day should be selected for this important exercise.

Moral lessons will intermingle themselves with all others, and must be taken up as they arise; it is, however, a good practice to defer any important investigation to the beginning of the afternoon gallery lesson.

IV. DEVELOPING LESSONS.

For want of the habit of observing the properties of common things, and the evident conclusions to which such observation must lead, the most lamentable errors are often committed even by those who are considered educated. People are continually committing follies of which an unreasoning animal would scarcely be guilty. We have seen a person deliberately put one foot on the step of a carriage in motion, fully expecting the road to move on to accommodate the remaining foot. How few, when called upon for any muscular effort, know how to economize their strength, or can judge of the weights they are about to move. How few servants or parents think of the nature of the articles of food or of utility under their care, or reason on the cause of smoky fires, ill-cooked food, or ill-ventilated rooms, or could tell why danger lurks in a copper saucepan or a leaden cistern, or distinguish a mushroom from a fungus. To look beyond mere utility, how much intellectual improvement do we lose for want

of the habit of observation. To many persons nature is a sealed book. When they walk abroad, the animal and vegetable life around them appears but a hopeless mass of confusion, in which they fail to perceive the order and beauty of Divine wisdom. To them the stars tell no wonders, mark no seasons, and, from a want of this knowledge in the reader, the most accurately written description often conveys but a vague shadow of the reality. To remedy these evils, the education of the perceptive faculties must be commenced in infancy, carried on in youth, and confirmed in manhood.

To cultivate the latent powers of children is the intention of those lessons which, in an infant school, are called developing. If, for instance, the ear be not trained in early life, the power of distinguishing musical sounds remains very imperfect; yet, in a school, all will learn to sing, unless where any positive defect of hearing or voice exists. The same may be said of drawing, which is less difficult in many respects than writing. Take, as a further example, the faculty which enables us to judge of weight or resistance, and observe how it becomes strengthened by education in workmen who have to perform mechanical operations; no doubt there are differences of natural ability in this respect, but most men acquire sufficient skill for the purposes of their respective arts. Now the business of elementary education, in its widest sense, embraces the development and training of every faculty so far as is necessary for the common purposes of life, and, in so doing, it prepares the pupil for special instruction of whatever kind.

From much experience, we have found that it is better to commence by teaching the properties of things separately; so that each may make a distinct impression before the pupil is required to recognize it when in combination. Simple perceptions may be divided into those of form, size, position, number, weight, motion, color, temperature, taste, odor, and sound; all these require cultivation; and as the senses are the channels by which they are conveyed to the mind, their nature and mutual relation must be studied by the teacher. By the *eye*, we perceive form, size, position, motion, number, and color; by the *ear*, all sounds; by the sense of touch we perceive heat and cold, weight, form, motion, texture, size, and number. The senses of taste and smell are very intimately connected with each other, both in their uses and mode of action.

The education of the senses commences with life itself, so that even the youngest child in an infant school has already acquired many ideas; and were it not so, the difficulties of the teacher would be almost insurmountable; as it is, enough remains to be done in

establishing a relation between words and things, and training the mind to correct methodical observation, before ordinary instruction can commence. We have found in practice that *form* is the most striking quality of bodies, and therefore the best to commence with; as, from its being capable of clearer definition, it is more easily comprehended than any other.

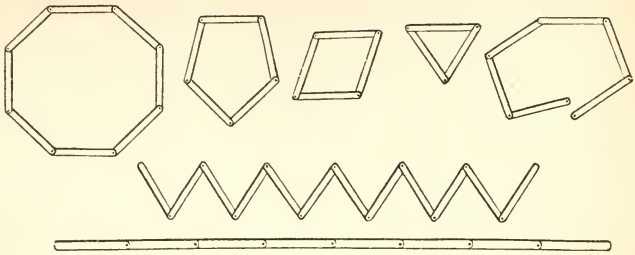
Form.

The first exercise for the younger children should be to learn to distinguish and name the regular polygons, without entering into any explanation of their properties. The best means of doing this, is for the teacher to prepare a set of models in card or pasteboard, of the required forms, of not less than six inches diameter each, which should be exhibited singly, and the name repeated by the children. If two sets be prepared, it is a good first exercise for the teacher to hold up a form and require the little learner to select a similar one to match it; when, the two being placed on each other, their identity can be shown.

In further explaining the properties of figures, we must advance by slow degrees, and beware of impatience or haste; and, as each definition is given, it should be fixed in the mind by abundant illustration, as the great object is to give certainty and clearness to the mind.

We suppose the children to be seated in the gallery for these lessons, and the teacher furnished with a blackboard and chalk. Each figure required for illustration must be accurately drawn; for although a student far advanced in geometry may be able to comprehend a diagram rudely sketched, because he has in his mind a correct conception of what is intended, yet, in imparting first ideas of form to children, it is indispensable that all representations should be truly and neatly drawn. Should the teacher be unable to do this by hand, a ruler and compasses will smooth all difficulties, and the necessary diagrams may be prepared beforehand, to save time during the lesson. Large compasses constructed of wood, with a chalk-holder, can be obtained; or a very good substitute may be made with a lath, a foot long, having a piece of chalk tied to one end and a common brad-awl inserted at the other, to form a center, by shifting the place of which, circles of different diameters may be accurately delineated. With two centers and a loop of twine, ellipses can be drawn; and the sight of these simple contrivances is instructive to the children.

Another means of illustrating geometrical forms is by the gonigraph, an instrument consisting of ten short rulers or joints of iron hinged together. The facility with which various lines and forms can be represented by this contrivance, renders it very popular in infant



GONIGRAPH.

schools; and it has the additional advantage, that it can be used by the children themselves.

We now proceed to give such hints as are necessary for the order and succession of lessons on this subject, which the teacher must further expand and illustrate.

Length.—The first step is to give a clear conception of extension in one direction. Draw a fine straight line, and explain that it has *length* only; measure it with a string or compasses, and then give various illustrations of length, or distance from one point to another; stretch a string or tape, divided into feet, along the room, and show that the room is so many feet long; remove the string, and explain that the length of the room is still there, and would be the same whether the room was wide or narrow. Make the different children tell where they live, and point out that some have far to come to school, and others a less distance—that in each case we speak only of the *length* of the way, not of its width. Extend these illustrations: as the length of a stick, of a road, a street, a table, the play-ground, a line, and the like. Also draw proportional lines, and compare them. Distance from one place to another is always said to be so far, or so long; and never so broad, or so thick. A road would be just as long whether it was a good road or a bad one; whether we ran or walked along it, or went by a railroad, we should go over the same distance, although in different periods of time.

Length and breadth.—A surface has length and breadth, but no thickness; it is the outside boundary of any thing, as the surface of the floor, of the ceiling, the walls, the play-ground, and so forth. The largest measure of the floor is called length; the smallest, breadth, or width. One child may be made to walk *along* the room, and another *across* it. It may be pointed out, that if either the length or breadth of the room were made less, the *surface* of the floor would be smaller; and if the length of the play-ground were increased, its surface would be greater. The children may be made to point out

various surfaces, and show their length and breadth; as those of a card, pocket-handkerchief, blackboard. All surfaces are bounded by lines or edges, and the children should next touch or point to the edges or boundary lines of various surfaces.

Solid bodies have three dimensions, all crossing each other. The largest is called length; the next, breadth; the smallest, thickness. A box, or other object of some size, may be used as an illustration, and its different dimensions measured; and it may be easily explained that it occupies some space, and that many such objects would fill the room. Other illustrations should be given, and the children encouraged to point out solid objects, and guess at their different dimensions. Let the children repeat these definitions together.

A *line* has length only.

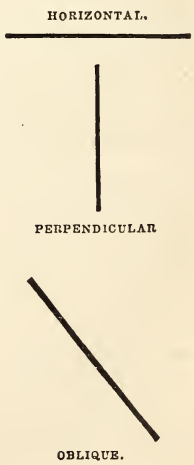
A *surface* has length and breadth.

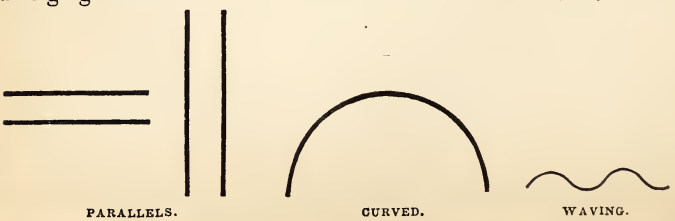
A *solid* has length, breadth, and thickness.

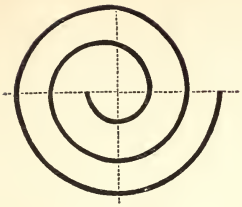
Familiar illustrations should be given of these properties; as, any number of lines put together would not make the thickness of the smallest thread; the whole surface of the floor is no part of the substance of the floor, but only the outside or boundary, and has no weight, or thickness.

Lines.

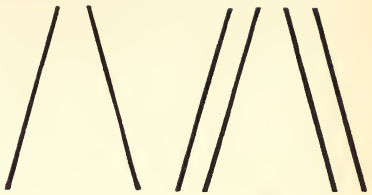
Lines define the shape and boundary of things, and by lines all things are measured. A line is the distance from one point to another. These points are called its ends. Lines are divided into *right* lines, or the shortest distance between two points, as when a string is stretched tightly; and *curved* lines. Curved lines are of many varieties, as circular and elliptical curves. Illustrations must be given on the blackboard, and the children required to find examples for themselves, in various objects, of *straight*, *curved*, *waved*, *spiral*, and other lines. The *direction* of lines should next be taught, as horizontal, perpendicular, oblique, parallel, converging, and diverging lines.







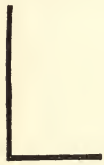
SPIRAL.



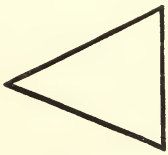
DIVERGING.

Angles.

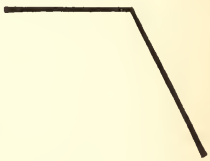
When lines meet or cross each other, they form angles or corners. Give examples: as the corner of the room, of a book, a board, a table. Draw on the blackboard the three varieties of angles, right, acute, and obtuse; require the children to point them out frequently,



RIGHT ANGLE.



ACUTE ANGLE.



OBTUSE ANGLE.

and to find other angles or corners answering to them. Make the children form the different angles for themselves with the gonigraph, or draw them on the blackboard, or on slates held in the lap; show how many angles can be formed with *two* lines; with *three*, *four*, *five*. These figures should be drawn on a large scale, and the children required to count and point to the different angles.

Plane Figures.

Lines are said to be parallel when they are at the same distance from each other in every part; if ever so long, they will never meet. Two lines in any other position, on the same plane, converge, and will meet or cross each other; but in no case will they form a polygon or enclose a space. This must be easily illustrated with two rulers, or two school forms, which can not be made to enclose a space between them. A farmer could not enclose a field with *two* straight hedges: *two* straight walls would not make a house or room; but *three* straight lines will enclose a space, and form a triangle. Draw an accurate equilateral triangle on the blackboard, measure each side with a string or compasses, and prove it to be equal-sided. Allow some of the children to form the same with the gonigraph, or to attempt to draw it, or to form it with three laths or rulers of equal length. Explain to them that only *one* kind of triangle can be formed with the same sides. A triangle may have only two of its sides equal, and is then called isosceles. Prove to the children the

equality of two sides in each of these figures, and lead them to point out their differences, and to distinguish the different kinds of angles. A triangle may have all its sides unequal, and is then called scalene. A similar proof should be gone through of the inequality of the sides, and the children required to point out the acute, right, or obtuse angles, and the longest and shortest sides of each figure.



EQUILATERAL TRIANGLE.





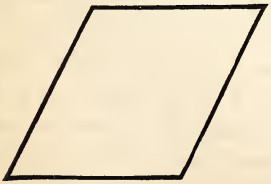
SCALENE TRIANGLE.

In describing an equilateral triangle to little children, it may be said consist of three equal straight lines, one leaning to the right, one to the left, and one horizontal; it may also be dived into three equal acute angles; one opening downwards, one to the right, and one to the left. All the other triangles should be analyzed in the same simple manner, and representations of various objects in which they occur should be sketched, and the intelligence of the children exercised in distinguishing them.

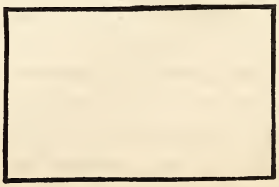
A square has four equal sides, and four right angles: if its two opposite sides are horizontal, the other two will be vertical. The opposite sides of a square are parallel: the distance from the corner A to the corner C is equal to the distance from the corner B to the corner D. A square may be described as four right angles. If a square is first formed with a gonigraph, and the opposite angles pressed toward each other, a rhomb is produced; the sides are still equal, but the angles are no longer *right* angles, two opposite ones being acute, and the other two obtuse. Many representative figures may now be formed for the amusement and observation of the children, composed of the triangle, square and rhomb.



SQUARE.



RHOMB.

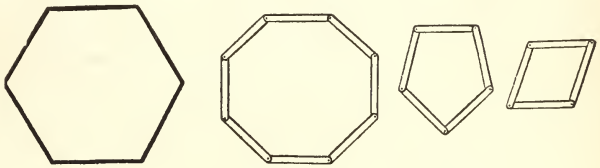


RECTANGLE.

A rectangle has four right angles, and its opposite sides are equal

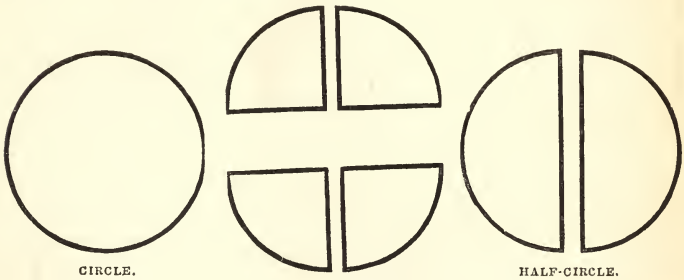
but its adjacent sides may be unequal. It may thus be resolved into four right angles with unequal legs. As this is a form of frequent occurrence, sufficient illustrations may be found in surrounding objects, as windows, doors, slates, books, &c. The oblique parallelogram or rhomboid has its opposite sides and angles equal; but its adjacent angles and sides unequal. It may be separated into two acute and two obtuse angles with unequal legs.

The other four-sided figures are those with three equal sides, with two, and those in which all the sides are unequal: they are called trapeziums. A pentagon has five equal sides and five equal obtuse



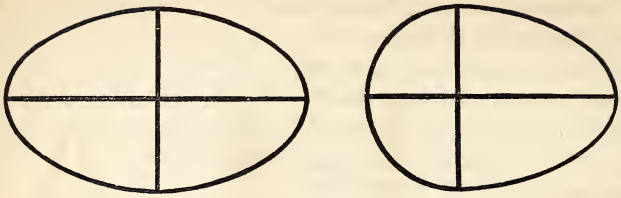
HEXAGON. OCTAGON. PENTAGON.

angles, and may be said to consist of five obtuse angles. The other regular polygons are, the hexagon, six sides; heptagon, seven sides; octagon, eight sides; nonagon, nine sides; and decagon, ten sides. All these should be carefully constructed before the children, by first drawing a circle, and then dividing the circumference into the proper number of parts, and uniting the points so obtained by lines. These figures can also be formed with the greatest facility with the gonigraph, and should be thoroughly learned and analyzed in every way before we proceed further.



CIRCLE. HALF-CIRCLE.

A circle is a plain figure bounded by a single curved line, called its circumference, every part of which is at the same distance from the center. The diameter of a circle is a straight line passing through the center, and bounded by the circumference. The radias is a straight line drawn from the center to the circumference. The parts of the circle having been repeatedly drawn and explained, it should



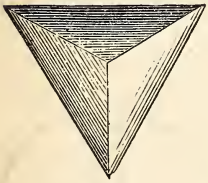
ELLIPSES.

be divided into semicircle, quadrant, segment, and octant. The nature of the ellipse is best illustrated by constructing it before the children, and varying the proportionate axes.

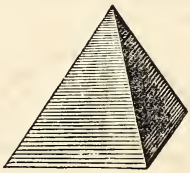
A spiral line may be illustrated by a slip of card rolled up and allowed to uncoil by its elasticity; by a piece of watch-spring; by the tendrils of plants; and its occurrence may be pointed out in univalve shells. The line may be drawn for illustration, by tying a piece of chalk to a string, and winding the string about a fixed spindle as a center, and tracing the line as you unwind it. Waved lines are shown by the moving surface of water, or by a cord shaken, and by drawing.

Solids.—Definitions.

A tetrahedron is a figure bounded by four equilateral triangles. It has six edges, four solid angles, and twelve plane angles.



TETRAHEDRON.



SQUARE PYRAMID.



TRIANGULAR PRISM.

A square pyramid is bounded by four triangular sides and a square base. It has eight edges, five solid angles, and sixteen plane angles.

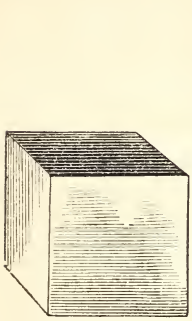
A triangular prism is bounded by two equal and parallel triangles and three rectangles. It has nine edges, six solid angles and eighteen plane angles.

A cube is bounded by six square sides, and has twelve edges, eight solid angles, and twenty-four plane angles.

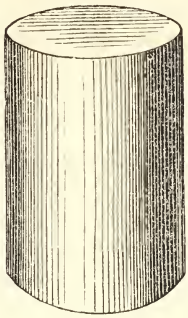
A cylinder is bounded by two equal plane circles, parallel to each other, and united by one curved surface.

A cone is a figure having a circle for its base, its side being a curved surface ending in a point, called its apex.

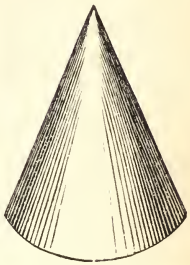
A sphere is bounded by one continued curved surface, which is every where at the same distance from its center.



CUBE.



CYLINDER.

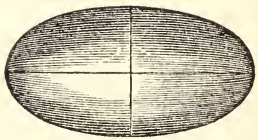


CONE.

A spheriod is a solid formed by the revolution of an ellipse about its axes.



SPHERE.



SPHERIOD.

The regular solids made in wood should be first named and distinguished by the children, without explanation; and they should be made to mention as many things as possible which they may happen to know of the same shapes. They should then learn to distinguish and count the edges, sides, corners or solid angles, and plane angles. By drawing the mathematical figures on pasteboard, and then cutting the lines half through, so that the parts can be turned up and brought together, they will represent the first four angular solids, and afford a very useful explanation to children. Also, by means of wire forms, the manner in which the curved solids are generated may be shown; for instance, by suspending a ring or hoop, and causing it to revolve, a sphere is described. In the same manner, a triangle in revolving will describe a cone; an ellipse a spheriod; and a square or oblong a cylinder.

Specimen Lesson on Form.—Solids.

How many objects have I placed before you?

Are they all alike? Are they different in shape or in size? Are they made of the same substance? Repeat their names after me, sphere, cube, cylinder, cone. Repeat the name of each as I point to it. Who will come and point out the sphere? That is right; now look at it, and see if it has a flat side. No; it

has only one curved surface. Is it the same in every part? If the surface were not the same in every part would it be a sphere? Repeat with me, "A sphere has one curved surface, every where the same." What part of it do you see, the inside or the outside? What is the outside called? What is the middle of a solid called? What things have you seen of this shape? If a marble or a ball were not exactly a sphere, would it roll evenly? What then is the best form for a ball or marble? Do you know that the earth on which we live, and the sun and moon, are nearly like this ball in shape? Now tell me what part of the earth do you live on? Suppose you lived down in a coal mine, would you live on the surface then?

Which of these two solids will stand where it is placed, the sphere or the cube? Why? Do you know what an edge is? Two sides must meet to form an edge. Some edges are sharp, some square, and some blunt. Has the sphere edges? One of you, little children, come and point to a side of the cube. What shape is the side? Are all the sides of a cube alike? Where three sides meet, they form a corner or solid angle. Show me a corner of the cube. Some one must now come and count the sides of the cube for me. You see they are all flat and square. Repeat, six flat square sides. Now count the corners or solid angles. Three plane angles meet to form one solid angle, and three edges, as well as three sides, meet in each angle. Repeat, eight solid angles or corners, in a cube. Now count the edges; pass your finger along each; say, twelve straight edges. Repeat the parts of the cube again; six square sides, eight solid angles, twelve edges. Now tell me the parts of a sphere; one curved surface, every where the same, and always at the same distance from the center. Name all the things you can which are like a sphere,—now those like a cube. Show me the edges and corners of this box—the surfaces. Can I roll this box along? No; because it has flat sides. Can I roll the ball? Yes, because it is curved.

What figure is this? A cone. Will it stand? Yes, because it has one flat surface. Take it up, and tell me what shape the part is on which it rests. What is this part called? You can not tell, I see, so I must tell you. It is called the base. Repeat, a cone has a flat circular base. How many surfaces do you see, besides the base? It is flat or curved? What does it end in at the top? Say, a cone has one curved side ending in a point. Has it any edges? Now repeat the names of the parts of the cone, as I point to them—one flat circular base, one circular edge, one curved side, one point. Look, I have made a cone of paper. Is it like the other cone? No, they are not alike; for the paper one you see, is hollow, but the wooden one is solid; and as this little child here says, the paper one is longer and narrower; but you see, children, that the parts of both are the same; each has a point, side, edge, and base.

Who will find me the cylinder? Has it one end or two? What shape are they? Repeat, two circular flat ends. How many curved surfaces has it? Say, one circular curved surface. Now think of all the things you have seen of this shape. Are the bandbox and drum solid? You have mentioned a column, a pole, a roller, as being like a cylinder; are *they* solid or hollow? Is the cylinder a good shape to roll along? Yes, and the two opposite wheels of a coach are like a cylinder with the middle part cut away. Will a cone roll along? No; you see it will only roll round in a circle. Which of the four solids before us is most like the stem of a tree? Which resembles an orange? Which is nearest to the shape of the room we are in? Which is like a sugar-loaf?

These questions should be extended and sometimes reversed; as, What is shaped like a cylinder? &c.

The advantage gained by learning first the regular geometric figures is the accuracy and certainty which it gives the learner; but, whatever the lesson may be in which *objects* are used, their forms should be analyzed.

Color.

The most simple means we know of by which to impart an accurate knowledge of this subject is to have the various tints on separate cards, and beginning with the three primitive colors, red, blue, and yellow, to exhibit several shades of each, taking care to impress them

separately upon the memory. These various cards may then be thrown together, and the children exercised in selecting particular tints. In subsequent lessons, the colors in clothes, pictures, and other objects may be distinguished, and then the memory exercised by calling to mind absent things in which they occur. The intermediate colors, purple, orange, and green should next be gone through in the same manner; proceeding then to the less pure, as brown and gray. It will be found that very few children have any certain knowledge of colors without this instruction, and that it can be made attractive by constant reference to nature. When the subject is so far learned, it may be extended by teaching the distinction between reflected colors and those transmitted through transparent substances, as glass, fluids, and air. Prismatic colors may be easily shown, by throwing the spectrum of the sun's rays on a wall or ceiling, and by allowing the children to look through the prism.

The colors of thin films are easily shown, by letting fall a drop of oil on the surface of water, or in soap-bubbles. Various other distinctions will occur to the teacher, who should consider that the knowledge of these simple elements is most important to the future progress of the child.

Specimen Lesson—Primitive Colors.

Teacher—I am going to give you a lesson about colors to-day; but first, can you tell me what enables you to see them? If your eyes make you see colors, how is it that you can not see them at night; Well, now tell me how it is that you can see in the day. Yes; that is, without the light you could not see things at all. Are all things colored? No; some things are white, and some are black, and white and black are not colors; the air in the room has no color, nor white paper. If every thing in the world were white, do you think it would be as beautiful as it is? Yet, in winter, when things are covered with snow, we like to see it; but is every thing white *then?* You are right, the sky is still blue, the houses and trees and animals are not altered, except where the snow lies. There are a great many colors in nature, but to-day we will talk about only three. The first I shall show you is *blue;* and see, I have several shades of blue, some light and some dark. Look at them well, and then tell me if you see any thing else in the room that is blue. You say your frock is blue; well, which of these tints is most like your frock? Yes, that is right, it is *dark* blue. What other thing do you see that is blue? Some *eyes* are blue. Well, so they are; some are dark blue and some light blue. Can you tell me any thing else that is blue? Who will find out which of these tints is like the sky? Yes; it is a pale blue. Blue is a very pleasant color to look on, and God has made many things in nature of this color, as the sky, and also the sea and lakes which reflect the color of the sky; amongst flowers, the blue-bell, violet, and iris are of this color, as are *some* stones and shells. If the sky were red instead of blue, it would be most painful to the eye. Sometimes, when a town is on fire, or when a volcano is pouring out lava and fire, the sky is red, and it is then terrible to see; but it is very pleasant to look at the blue sky or the distant sea, and think how good and great God is, who made this beautiful world for his glory and our use.

The next color I have to show you is red. It is very bright, and gives great beauty to many things. Out of all these shades of red, who will show me the lightest or palest red? Yes; that is right. What have you seen of that color? Quite right; the rose and a fair face are of this tint, but some parts of the face are of a darker red. Who will show me the color of the lips? Now who will point

to the brightest red? What have you seen of that hue? "A poppy," "a soldier's coat," "a country-woman's cloak." Yes, all these are of a bright red, and many other things we could name; but now we must look for the *darkest* red. What have you seen like that? Very good; many flowers are of this rich color, and so are many kinds of materials, such as silk, satin, cotton, stuff, and various other things. Now repeat the names of the different shades of red. I want you all to shut your eyes, and not open them until I stamp my foot. Now what color am I holding up? Some say golden color, some say yellow; well, yellow is the proper name. When the sun is setting, it casts a rich yellow light over every thing. Now try and think of something you have seen of this tint. "The sand on the sea shore," "some kind of rocks," "the corn when it is ripe," "the leaves of trees in autumn." Yes; all these are of a yellowish color, and the sand in great deserts has this tint too. Can you think of any metals of this color? Now, some fruits? Now, some flowers? Well you have named a great many things, and there are many more, such as sulphur, mustard, the pretty flowers of the laburnum tree, the furze bushes on the hills, the daffodil, and the sunflower. Now you may look at each other's dresses, and find me all the parts that are either blue, red or yellow; first find the dark shades, then the light ones. Now we have found out so many colored things, let us finish our lesson by pointing out all the things that are white, and then those that are black in the room. White is like bright daylight, and black is like dark night. When I put a piece of white paper and a piece of black cloth side by side, they both look brighter by contrast, and so also colors make each other look brighter. The sea seems of a deeper blue when we see it and the yellow shore at the same time; and if red and blue flowers are placed together, it makes them both appear very bright. If all things were of one hue, it would look very dull; but the sky, the trees, the flowers and animals are all distinct and beautiful, because each has its own shade of color.

Size.

It is of little use to make children repeat tables of long and square measure, unless we first make them practically acquainted with the unit of measure upon which they are based. The teacher should therefore begin by teaching what an inch, a foot, and a yard are; and for this purpose a measure should be kept in the school. A five-foot rod, with white figures on a black ground, is best adapted for this purpose, but a common carpenter's rule will do.

When the children are well acquainted with the divisions on the rod or rule, various objects, large and small, should be measured before them, and their dimensions repeated. The children may then be exercised in drawing lines of specified lengths on the blackboard or slates. The next step is for them to endeavor to guess at the dimensions of things placed before them, and then to correct the various guesses by measuring the objects. The sizes of things mentioned in other lessons may be made useful exercises for the judgment of measure, as also the comparative size of objects of the same class.

Specimen Lessons.

We are going to learn to-day to distinguish things by their size. Some things, you know, are small, some great. Children are not all of one size or of one hight. See, I have placed four children in a row before you, will you tell me which is the tallest? How tall should you think he is? Well, we will try how high he is by the measure: count the feet and inches with me; three feet and eight inches, and he says he is six years old. Now, how tall is the least of the

four? We shall see who is right. You see she is two feet ten inches high, and *she* is three years old, so you see the hight of children is usually in proportion to their age; they continue to grow until they are as big as men and women, and a *tall* man is six feet high; a woman is not so tall. But some people are large and stout, others are thin, so that one man may be really *larger* than another, though not so tall. Look at this sheet of paper, and this slate; you see that they are exactly the same length and breadth, but which is the larger? The slate. Why? This book is not so long nor so wide as the slate. Which is the larger? The book. Why? It is so much thicker. How high do you think this room is? How long? How wide? How high is the door? Could an elephant get in at the door? No; it was only made for the hight and size of men. If an elephant were in the room, how high would he stand? Ten feet. Look, I now hold up this measure, so that it reaches ten feet from the ground; that is very high for an animal to be; but the giraffe is sixteen feet high; so that a man standing on the back of an elephant would only be raised as high as a giraffe! Can you think how large a whale is? He is seventy feet long! We must measure his length in the play-ground, for we have no room here. The little Barbary mouse is the smallest of four-footed beasts; he could lie in the hollow of a child's hand. How small he would look placed beside a whale!

Progressive Sizes.—A grain of sand is smaller than a gravel-stone; a gravel-stone than a pebble; a pebble than a boulder-stone; a boulder than a rock; a rock than a hill; a hill than a mountain. A mountain compared to the earth is like a boulder compared to a mountain. The earth compared to the sun in size, is like a mouse compared to an elephant.

Sir J. Herschel suggests that, in describing the solar system, the sun may be represented by a globe two feet in diameter; Mercury, by a grain of mustard-seed; Venus, by a pea; the Earth, by a pea; Mars, a rather large pin's head; Vesta, Juno, Ceres, Pallas, by grains of sand; Jupiter, a moderately sized orange; Saturn, by a small orange; Uranus, a full-sized cherry, or *small* plum; Neptune, a *large* plum.

Such things as the following may be shown to the children to illustrate progressive sizes:—

Seeds.—Poppy seed, mustard seed, sweet-pea, garden pea, bean, nut, walnut, cocoa-nut.

A spider line, a fiber of silk or cotton, a hair, a bristle, a thread, a packthread, twine, cord, rope, cable.

Thickness.—Silver paper, writing paper, parchment, card, pasteboard, mill-board, a piece of deal board; gauze, muslin, silk, linen, sheeting sail-cloth, sacking, and carpet.

Order and Position.

In accustoming children to judge of relative position, the number of objects referred to should at first be very limited; two or three will enable the teacher to illustrate most of the positions in a practical manner, which should be done frequently, or until clearly recollected. The teacher may also place several children in a line; or square, in pairs; or threes, singly; or in a group, and so on, to explain those terms.

Make the children name the position of the objects in the room, as the fireplace at one end, the door in the middle of one side, the windows at the opposite side. Let the teacher then sketch on the blackboard a plan of the room, and mark the place of the several objects; the children may copy this on their slates; change the position of light articles, as a stool or chairs, and mark their new places on the plan. Make a similar sketch of one side of the room, and mark the place of the windows, pictures, &c., and let the children

do the same on their slates. Make an outline only of the wall or floor on the blackboard, and let the children mark on it the position of secondary objects.

Teach the children the relative position of the parts of the body. Describe and illustrate the meaning of names of collections of things; as a cluster of grapes, a heap of stones, a flock of sheep, a herd of swine, a crowd of people, a group of stars, a bunch of flowers, a wood, a forest, a grove of trees, a fleet of ships, a shoal of fish, a covey of birds, a street, and a square of houses.

Scattered.—The stars appear to be scattered over the sky; corn is scattered over the ground for seed; grain is scattered in the poultry-yard for the fowls to feed on; if a shepherd leave his sheep, they no longer remain as a flock, but become scattered abroad.

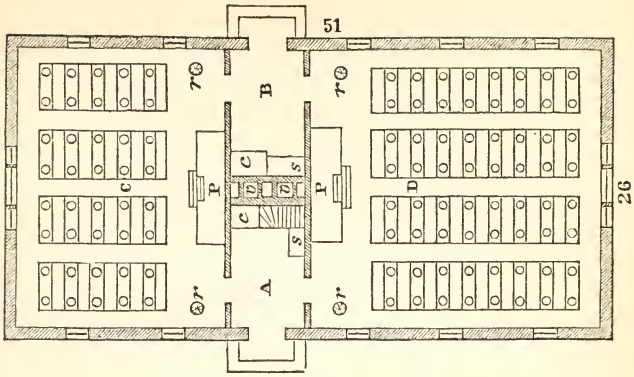
Compact.—In a hayrick, or a stack of oats, the stems and seeds are all pressed together in a compact mass. The same may be said of a stack of wood or turf; rocks are compact masses of stone; the leaves of grass in a field stand close together, but the flowers are scattered over the field; in a garden, the flowers are arranged in *order*. Many other terms should be illustrated in the same way.

Make the children well acquainted with the cardinal points as relates to the school-room, and try to extend this knowledge by the relative position of their respective homes. On the blackboard make dots or points in different positions at the top, bottom, right hand, and left. Make points in the position of the angles of triangles, squares, and other figures. Make dots to represent the capital letters, or to suggest the form of any other objects, and let the children describe their positions.

Show a picture to the class, and make them describe the relative position of its parts. Remove the picture, and require them to do the same from memory. Make a simple arrangement of dots or figures on the blackboard; let the children look well at it: erase it, and let some one of the class try to reproduce it, the rest trying to correct him when wrong.

Specimen Lesson.

Let the teacher sketch a small but accurate plan of the school-room on the blackboard, and mark across it two lines at right angles to each other, directed to the cardinal points. First allow the children to point out the different parts of the plan, and particularly the position they themselves occupy on it. If we go out at the front door of the school, what street do we get into? Which way does it lie? Tell me, that I may add it to the drawing. Now it is drawn, one part goes northward and the other to the south. Who lives in this street? I do. Point in the direction of your home; is it north or south from us? What must I put behind the plan of the school-room, or to the east side of it? The play-ground? What shape must I draw the play-ground? Where must I mark the swings? What street is behind the play-ground? Yes, —— street lies north



and south. Does any one go home that way? Do you go along any other street besides? Yes, —— street. Then you go to the east; see, I have drawn the two streets that form your way home; first you go so far to the south, then you turn to the east. In the morning, the sun would shine along this street, or from the east. At midday he would shine only on the north side of the street, or from the south. Show me which side of the school the sun is on in the morning? At noon? In the evening?

Of course the above must be varied to suit the locality, but its use in leading to first ideas of geography is obvious, and its gradual extension, as the ideas of the children enlarge, must be left to the teacher. When much more advanced, a large map of the town or neighborhood should be used, and each child required to trace its own way home, and any streets or roads it has been accustomed to traverse. This is a work full of interest and real instruction. Mr. Wilderspin recommends maps on a large scale made in oil cloth, on which the children could walk, and movable models to be placed on them. This is no doubt an excellent plan, but also an expensive one. It might be very useful, however, to chalk a large plan on the floor for the younger classes, as it would possess more reality to them from its size and position than a small map suspended vertically.

Number.

First ideas of number are best communicated by reference to familiar objects, and these should be of several kinds, to prevent the association of the numbers with one class of things only. Let the younger children learn to count cards, books, pence, or any objects which may be at hand. When a large number of units are required, let one child first hold up a finger, then the next, and so on as many as are wanted. Or let them hold up a finger of each hand, then two, then three, or more. One hand may be held up with the fingers spread, while the little class count one, two, three, four, five; another hand leads them to ten, another to fifteen, and as many more as they

are able to count. This has the advantage of employing both hands and eyes, and affords amusement. When once the idea of number is acquired, the arithmeticon serves the purpose of giving combinations of number, and of working any arithmetical problem.

Specimen Lesson.

The teacher should be furnished with several sets of small objects.

Teacher.—I have here five books, five pence, and five sticks; count them with me. Now, I have placed them all on the floor, and I want some little child to bring me two books. That is right. Now who can bring me three books? Quite right; now put them back again. Who can bring me a penny and two books? Now bring three sticks and a book. Now a book, a penny, and a stick. How many are they together? Who can bring me four sticks, five books, and five pence? Who will answer me a question? I will. Well, how many brothers and sisters have you? Try to tell me their names. William, Peter, and Mary. How many together? Who can count the legs of the chair? The bars of the grate? Clap your hands once, now twice, now three times.

This subject is too simple to require further detail; yet it must be taught progressively, otherwise the mind of the learner is apt to become confused. It will be perceived that it is entirely preliminary to arithmetic, and therefore it is best in this stage to keep to small numbers; and when arithmetic is commenced, still to carry on the previous process in conjunction with it, in order to give reality to the value of figures. It is particularly useful to give easy exercises in mental arithmetic, in which the notion of real objects is associated with number.

Weight.

In commencing this subject, the teacher should first call attention to such general facts as the falling of bodies towards the earth, the tendency of water to flow downwards, the difficulty of raising any heavy object up from the ground, and the sensation of weight in the human frame. Cubes or spheres of equal size, formed of lead, stone, wood, cork, or other substances, strikingly different in weight, should be examined and compared by the children. Bodies that are lighter or heavier than water may be distinguished by actual experiment. The resistance of the air to falling bodies may be easily shown by letting fall at the same instant such things as wool, cork, and lead, and watching their unequal rate of descent. The pupils should be allowed frequently to handle and compare objects of different density and size.

The next step is to make the children acquainted with the standard weights, and then to let them judge of the weights of various things, testing the accuracy of their guesses by weighing the objects before them

When a pretty accurate knowledge of small amounts of weight is acquired, it may be extended by degrees to familiar examples of

greater quantities; but in this, as in the case of number, it is useless to attempt to expand the idea too rapidly; the process must be progressive, and, if hurried, would lose its reality.

The use of wooden bricks and other mechanical toys in the playground, greatly assists in developing the perception of weight.

Some idea of the nature of the mechanic powers should be given in connection with this subject, and this may be easily done by means of models and by simple experiments.

Specimen Lesson.

The teacher should be provided with several different substances for experiment. Wool, cork, pumice-stone, marble, wood, lead, or such objects as are within reach, may be used for illustration.

Teacher.—You see in my hand two balls of equal size. I want some one to try for me which is the lighter of the two. They are very different in weight; one is a ball of cork and the other of lead. If I let the leaden ball drop from my hand, can you tell me the direction in which it will go? It will fall down to the floor. Yes, for we never see any thing fall up to the ceiling or to one side, but always downwards, because the earth draws all the smaller things which are near it towards itself. The earth draws all you little children towards it, and when you try to climb a hill, you find that lifting your feet from the earth is hard work. Will you watch what takes place when I let the ball of lead fall from my hand? It strikes the floor and makes a loud noise. Now see if the same takes place when I drop the ball of cork. No, it makes only a faint sound. Why is this? The lead is heavy and the cork is light. I have here two more balls, one of wood and one of stone. Who will come and try their different weights? I am now going to place the four balls in this glass of water, and you must observe what happens. Two of them sink and two swim. Why do the cork and wooden balls swim? You can not tell; well, I must explain to you that wood and cork are lighter than water, and so come to the surface; but lead and stone are heavier than water, and sink down in it. A fish swims in the water, because it is about the same weight as water; but an oyster lies at the bottom of the sea, because it has a heavy shell. If things upon the earth had no weight, men and animals would not require to be strong; but the larger an animal is, the more strength it must have, to be able to move about. Could any little child here lift me from the ground? No, I am too heavy, and you are not strong enough. Quite true, but I could lift any of you, because you are all lighter than I am, and I must have strength enough to be able to move my own weight. A horse can carry a man because a horse is larger and heavier than a man, and has more strength. If a little child were to run a great way, would he not be tired? Yes, he would have to carry the weight of his own body all the way he went, and this would tire him. Look at the walls of the school-room. What are they made of? Are they not very heavy? Why do they not fall? Because they are upright or vertical. Would they stand if they were inclined? No, they would then fall; for all heavy things which are not supported will fall straight down. When we stand, we take care to stand upright, or else we should fall. When people fall, we say they lose their balance; that is, they throw more of their weight to one side than to the other, which causes them to come to the ground. Would you stand near a wall that leaned to one side? No, it would be dangerous to do so; it might fall and kill you.

Some things are very light, compared with others of the same size. Will you tell me of all the light things you know? Now name those that are heavy. Will you try to think of things that are bought and sold by weight? I have here a penny and a halfpenny; why is the penny worth more than the halfpenny? Because it is larger and heavier. Yes, metals are valued by weight.

When I put this iron weight into one scale, and this piece of wood in the other, what happens? The scale with the iron sinks down; the other rises. Why is this? Because the iron is heavier. And which is the larger? The wood. What

should you then say of the wood? It is a lighter substance than the iron. I now put a package of wool into one scale, and the piece of wood in the other. Which appears the heavier now? The wood. Which is the larger? The package of wool. So we find that wool is lighter than wood in proportion to its size. All things which we see have weight. Even the air has some weight, as you will learn in a future lesson. If it were not so, we should have no power to move or to work; without weight, the workman's hammer would not strike, the water would not turn the mill to grind the corn, or the wind move the great ships over the sea, to fetch us good things from distant countries. Even the rain could not fall from the sky to make things grow, if it had not some weight; so that when we find it difficult and laborious to move about, or carry heavy things, we should remember how useful and necessary it is for things to have weight, and how God, in his wisdom and goodness, made every thing just as heavy as it should be. He made the air light for us to breathe and to move about in, the heavy stones to build our houses, light wool and cotton to make us warm clothes, and heavy metals to make our tools. Let us always think that He has made every thing in the way it should be.

Sound.

First lessons on this subject should not be of a musical character, but chiefly confined to the discrimination of ordinary sounds. The attention of the pupils may be directed to the varieties of the human voice in children and grown persons, in men and women, and in different individuals; also to the different modes of utterance, as speaking, calling, singing, whispering, and so on. Sounds may be produced experimentally, as by the ringing of bells, the noise made by striking various bodies, and by other means; and these should be divided into sharp, grave, loud, faint, or as many varieties as can be exhibited.

The next step is to require the pupils to observe sounds for themselves. Children, when first called upon to mention the sounds they are acquainted with, will not, perhaps, be able to remember more than ten or twelve; but we have known many who, in a week or two after their attention had been directed to the subject, could enumerate upwards of one hundred. It is useful to lead them to classify their observations, as into the voices of beasts, birds, sounds produced by insects, by the footfall of men and animals, by the motion of carriages and machinery, by workmen in performing various mechanical operations, sounds produced by the motion of water, air, and by other natural causes. Sounds may also be divided into kinds, as roaring, rumbling, crashing, crackling, murmuring, rolling, tinkling, echoing, and so on; the intention of such exercises being to connect words with definite ideas, and to cultivate habits of correct observation.

Directions for a Lesson on Sound.

Strike in succession two bells, one much sharper in tone than the other, and call attention to the different pitch in their sounds. Let the children try to produce high and low tones with the voice. Produce sudden sharp noises, as by striking hard substances, by the breaking of wood, or by the children calling out in a high key and stopping suddenly; then sounds of an opposite character, as by

the rapid movement of the feet of many children, as they sit in the gallery, by rolling any heavy object on the floor, or by the lower tones of the voice. Call attention to such slight sounds as those produced by the rubbing or striking of various substances, and then let the children listen with closed eyes, and try to determine the causes which produce them. Place several children out of sight and let them speak in succession, while the class try to discriminate their voices. Direct attention to the feelings expressed by the human voice in exclamations of sorrow, joy, pain, terror, mirth, and other emotions, and to the voices of animals expressive of their feelings and wants.

Explain the difference between inarticulate sounds, such as laughing, sobbing, muttering, screaming; and articulate sounds, as speaking and singing.

The kind and amount of instruction given in each lesson must, of course, depend entirely upon the age and advancement of the pupils; the subject may as easily be treated in a way to suit a child of three as of ten years of age, and such preliminary lessons are an excellent preparation for correctness of ear in speaking and singing. Indeed, when developed, the imitative power of children is so great that no refinement of tone or inflections of voice are difficult to them; and hence the importance of a pure pronunciation and correct manner of speaking in the teacher, as defects in this respect are but too readily imitated, and bad habits formed.

Developing Lessons on Objects.

When, by the preceding series of lessons, some idea of the general properties of things has been imparted, the observation of particular objects should be commenced; but we must always keep clearly in view the *principle* on which this kind of lesson rests, viz., that the children should discover for themselves the qualities of the object under examination, the teacher merely supplying the words needed to express them; for to *tell* the pupil that such and such qualities exist in it, which we are not able to demonstrate, will not develop his faculties. Hence it follows, that attention should be called only to the more palpable and striking characteristics, and that, if possible, the same quality should be traced through several examples, and even contrasted with its opposite, to render it more evident.

Suppose, for instance, two such substances as glass and india-rubber were chosen for a lesson. The most striking properties of the glass are that it is transparent, hard, brittle, sonorous, rigid, reflective. These are rendered more evident by contrasting them with the qualities of the india-rubber, which is opaque, soft, tough, not sonorous, flexible, dull. The idea of transparency may be rendered more general by reference to water, air, mica, crystals, and other examples, and also by extending the idea of the opposite property of opacity, and so on with the remaining qualities. We will now proceed to an example of this kind of teaching.

Lesson on Coal and Chalk.

Teacher.—Tell me what you observe in the object I now show you. *Children.*—It is white. Is it quite white? Yes, quite white. What else have you seen of the same kind of white? Linen, paper, snow. Tell me the color of this object. It is black. Is it black like this piece of cloth? No, the coal is bright and the cloth is not. But are not both *black?* Yes. Is the chalk bright and

smooth? Feel it and try. No, it is quite rough and dull. Now feel the piece of coal. Is it smooth? Yes, in some parts. Does it shine or reflect the light? Yes. Repeat now with me, coal is black and reflects the light; chalk is white and dull. I will make a line on the blackboard with the chalk. How is it that the chalk makes a white mark? Some of it rubs off. Yes, it is friable; that is, it will rub or crumble away. Now we will try to make the coal mark. Has it made any mark? No. I will tell you the reason: the wood is softer than the coal, and so it will not mark. Weigh the two substances in your hands, and tell me are they heavy or light. Try which feels the harder. Listen while I strike each of them, and tell me what you hear. The coal gives a sharper sound than the chalk. Yes, because it is harder; for you will find that soft bodies give a dull, heavy sound, and hard bodies a sharp sound.

I am going to hold the piece of coal in the flame of this candle; will you watch what takes place? The coal burns and gives out smoke. Say, coal burns or is *combustible*. Now, watch if the chalk burns when in the flame. No, it neither burns nor smokes. Say, chalk will not burn; it is *incombustible*. It is changed, indeed, by the heat, but you can not see the change now.

When we wish to break coal into convenient pieces, how do we do it? With a hammer. Can chalk be broken in the same way? Let us try. Yes, both coal and chalk can be broken by a blow, and are therefore called *brittle*. Do you think that coal or chalk is made by men? No; I will tell you: they are both dug out of the ground, and were formed by the power of God, and such things are called natural, while things made by man are called artificial. Is either of these substances transparent? No, most rocks and other things dug out of the earth are *opaque*, that is, no light will shine through them, nor can we see through them. Such things as are neither animal nor vegetable are called mineral, and these are mineral substances. Now let us repeat what we have learned about them: Both coal and chalk are natural, mineral, opaque, brittle, heavy. Coal is also combustible, black, smooth, shining, hard. Chalk is white, friable soft, and will not burn. You know that they are both useful. Will you try to name some of the uses of coal? To warm our houses, to cook with, to drive steam engines, to make gas, and so on. Now some of the uses of chalk? To write and draw with, to make whitewash, to make lime, to manure land. Now you have examined these two substances and know some of their qualities, I will tell you something more about them. Coal is generally found deep down in the earth, and men must dig down to get it. Some of you may have seen a well out of which water is raised, and the entrance to a coal mine is like a very deep well. Up this well or shaft the coal is drawn by a rope or chain, moved by a steam engine, and when the workmen wish to go down into the mine, they get into a box covered with an iron roof, and are let down. If you look on the map of England for the counties of Northumberland and Durham, it is there, on both sides of the river Tyne, that so many coal mines are worked; but there are many other places in England, Ireland, and Scotland, where coal is found.

If you wish to see a coal mine, you would first have to be let down the shaft very far; and then, when you arrived at the bottom, you would find many passages leading in different directions, along which little cars laden with coal are drawn by horses or pushed along by boys; and, in some places you would see the miners digging the coal out of the earth with pickaxe and spade, each with a lantern to light him, covered with wire-gauze; for a kind of gas like that which burns in the street lamps comes out of the coal, and if the flame of a candle or lamp touches it, it takes fire and explodes with a dreadful noise, often killing the poor miners who may be near; but this gas will not pass through the small holes in the wire-gauze, and so can not take fire from the miner's light.

Chalk is dug out of the ground, but it is not so deep in the earth as coal, and is often close to the surface. The men who dig it out are called chalk-cutters, and a great quantity of chalk is used to put on land to make wheat and other crops grow. When chalk is burned, it changes into quick-lime, and is then used for making mortar for building. Sometimes chalk is given to calves to lick, or put into the water which cattle drink. Although chalk is now found in the sides of hills, it was once underneath the sea; for sea-shells are found mixed with it, which must have got in it when it was in a soft state at the bottom of the sea, just as we find shells mixed with the soft sand on the sea-shore now.

Sponge and Bread.

Let us compare these two things, and try to find out their properties. First look at the sponge, and tell me its form; is it of a regular or irregular shape? What is its color? Feel it, and tell me what sensation it gives to your hand. It is rough. Look at it, and tell me if the surface is uniform or every where the same. No, it is full of holes. Things which are so are called *porous*. Try if you can press it into a different shape. Does it remain in the form you pressed it into? No, it springs back to the shape it was in at first. Yes, it is *elastic*. Dip it into this glass of water, and tell me what you observe. It takes up some of the water. Will you try, children, to remember what this quality is called? *Absorbent*. Take the sponge from the water and squeeze it dry. Is any of it gone? No, it is the same as before. That is because sponge will not melt or dissolve in water.

Now let us examine the bread. What is its color? Its form? Is it like the sponge in any thing? Yes, it has holes or pores. Can you press it into a new shape? Yes. Does it spring back to its former shape? No; things which can be pressed or molded into new shapes in this way are said to be *pliant*. If you rub the bread, what happens? It crumbles away. Will the sponge crumble when rubbed? No, it is *tough* and *elastic*. Try if the bread will absorb water. Yes; but you see the water changes the bread into a sort of pulp, so that it must be miscible in water. Try which is the lighter substance, bread or sponge? Sponge. Now tell me what you know about bread. It can be eaten. It is made from flour, and flour from wheat. Then what kind of substance must bread be? Vegetable. Show me the hardest part of the bread? What made the crust hard? When you toast bread, does the surface become hard or soft? Does it change color? What part of the bread is most like the sponge in color? What is sponge used for? Why is it useful for washing and cleaning? Because it is *soft*, *flexible*, *elastic*, and *porous*. Sponge is not a vegetable, like bread, but part of an animal which lives at the bottom of the sea, and men dive down to get it from the rocks on which it lives. Could you eat sponge? No, the qualities which make it useful for washing render it unfit for food. God has given to each thing some purpose to fulfill; and he has made bread wholesome and nutritious to eat, and sponge useful for cleanliness and comfort. Let us think now of all the properties we have found in these two things. They are both light, but the sponge is the lighter. Both are full of holes or pores. Both suck up or absorb water. Both can be squeezed into new shapes; but the bread remains in the shape into which it is put, while the sponge springs back to its first form. When soaked in water, the bread is changed; the sponge is not. The bread is easily broken in crumbs; the sponge is not, it is *tough*. Bread is yellowish white; sponge is brown. Bread is vegetable; sponge is animal. Bread is edible and nutritious; sponge is not. Both are rough to the touch, and of a dull surface. One is in a natural form, the other artificially prepared. If we were to try, we would find out a great many more properties in these simple things; but let us admire the wisdom and power of God, who made all things in so wonderful a manner. The most skillful and learned man could never make a piece of sponge, nor give it life as this once had, or cause a single grain of wheat to grow.

Lesson on a Penny.

What is this? A penny. What is it made of? Copper. What color is it? A reddish brown. Tell me its shape. Round or circular? Have you seen any thing else circular? A ring. Is a penny like a ring? Why not? A ring has the middle part cut away; a penny is solid. How many surfaces has a penny? Count and see. Two flat round sides, and a circular curved part. What geometrical solid is it like then? A cylinder. What kind of cylinder? A very short one. How many edges has the penny? Two circular edges. Are the sides quite flat? No, the edges are raised, and there are figures in the middle. What do you see on this side? The Queen's likeness. And on the other side? A figure of Britannia. Are these figures raised or sunk on the surface? Raised. Yes, they are said to be in relief. Do you know how these figures were formed on the penny? I will tell you; they were stamped by dies of very hard steel, on the surface of the copper, which is much softer than steel. To explain this to you,

I will melt some of this sealing wax, and stamp an impression of the penny on it Now you see I have made a copy of one side on the wax. Is it exactly the same? No; the figures are sunk on the wax, and raised on the penny. Why did the wax receive an impression? Because it was softer than the penny. Tell me what sound you hear when I strike the penny? A ringing sound. That is because it was pressed and made hard by the steel dies. If it were softened again, it would not sound the same; and bad money has generally a different sound from good, either from not having been struck in a die, or from not being made of the same metal. Now we will talk about the penny as *money*. You all know the *use* of a penny. Many of you, no doubt, have been intrusted with money by your mothers, to buy things with. Did you ever think why people are so ready to give their goods for money? Because they can spend the money again. Yes, but what makes a penny of any value? Because it is made of copper. You are quite right; copper is very valuable, and also very useful; it serves to cover the bottoms of ships, to make kettles and saucepans, and many other things. It is made into wire, and also, when mixed with zinc, it forms brass. But how do you think copper is first obtained? You know how many things can be got without much trouble. Common stones, and earth, and wild plants can be easily picked up; but did you ever see copper lying about the ground? Oh no! if it were so common as that, it would not do to make money with, although it would be just as useful for other things. However, much has to be done before the copper to make a penny is to be had. First, men have to search out the veins of ore in the rocks, and then to dig mines down to them, and rend the hard rock with gunpowder, and break it with hammers, and then pick out the bits of ore, which must be heated and pounded fine, so as to separate all the stony or earthy part, and then it has to be melted by great heat, and refined or made pure. All this costs much labor and skill, and employs many different men, who must be paid for their work; so that by the time it is made into pure copper, it is very valuable. But with all this trouble, only a certain quantity of this metal can be got; so that it is rather scarce, and this makes it dearer, and the better suited to make money; for you know that a few pennies, which can be held in the hand, are worth as much as a loaf, or a good quantity of potatoes. If I buy a penny loaf, I give a penny for the bread, because the corn that made the bread took much trouble to cultivate; then the miller must be paid for grinding it, and the baker for baking it; and as the loaf is valuable and useful for food, so the penny is valuable, because copper is useful for many things. Now suppose pennies were made of iron or lead, would they be as convenient? No; for to be of the same value they would require to be much larger, and would be too heavy to carry about. When much money has to be paid, we do not use copper, but silver or gold, which being worth more take up much less space, and are not so heavy in proportion. Shall I tell you a little story before we close our lesson? There was a very clever painter, who lived in Italy a long time ago. He spent much time and thought in painting a picture, and when he went to receive the money which was the price of the work, it was paid to him all in copper coin. The weight was very great, and he had a long way to go home; he was not strong, and the fatigue of carrying so great a weight along the hot road so injured his health as to cause his death. Now, if he had been paid in gold coin, it would have given him no trouble to carry home; for a very small weight of gold would have been as valuable as his great bag of copper.

Moral Lessons.—God.

A few years ago, not one of you little children was alive. Where were you then? Not in any place. God had not made you. Many children come to life every day, and many people die every day. But God was always alive! The world we live in was made by his word; but He lived before all worlds, before all men and angels, and He will continue to live forever. Is God like as we are? No, for *we* are all sinful, and He is perfectly good and pure. *We* know very little; He knows every thing: *we* can only see and hear a little way around us; *He* can see and hear ever so far. *We* can only be in one place at a time; God is in every place at the same time. He is here in this room now, and knows what we are all thinking about, and all that we do and say. He could destroy us all in a moment. Will he do so? No; for He is very kind, and loves us. He has told us how to become good, that we may go to Him, and be happy forever. He

sent us his Son Jesus Christ into the world to save us from our sins, and to show us what we ought to do that we may become his children. Although God is present every where, yet Heaven is called his dwelling-place, for it is there that He is pleased to show his glory most; there every thing is good, and pure, and holy; there saints and angels dwell, and those who serve God on earth will go there at last, to live forever in perfect happiness. Can we see God? No; not with our eyes; but we can think of Him in our minds when we see his wonderful works. If one of you saw a clock, would you think that it made itself? Would not you say, some man must have made it? If the clock were going, you would know that some one must have wound it up. A clock is a very curious work; the hands move, and the bell rings to tell the time; and many other things men make are very ingenious, but they are very different from the works of God. If one of you were to lose an arm, could any man make a new arm grow for you? No; for our bodies are the work of God. If you pluck a rose in the garden, can you join it again to the tree? No; for the rose-tree is God's work.

The great globe on which we live is always moving very swiftly on; *who* could move or stop so very large a thing? The bright sun goes on always shining; *who* could make so great a light? All the men and animals on the earth are fed every day; *who* finds so vast a quantity of food as to give all creatures enough? How many things we have to make us happy; from whom do these blessings come? From God. What can we give God in return? Nothing, for *all things* are His; but we should love Him for all his goodness to us, and trust in Him, and give Him thanks and praise for all we have. Let us think what God has done. He made all things. He supports and preserves all things. All his works are full of wonders. He sent his Son to redeem us from sin and death.

Let us think how great God is. He is all-wise, all-powerful. He is in every place; and He is eternal. He had no beginning, and he will have no end.

What comes from God? All life comes from him, and he is the source of love and truth, knowledge and power, justice and mercy. Without him we could not live a moment. Oh! let us love and serve him as long as we live.

Creation.

As I have told you something about God, we will now talk about Creation. Do you know what that word means? Well, I will try to tell you, but you must listen very attentively, and *think*, as it is rather difficult for little children to understand at first. I dare say you often sit upon a chair or stool when you are at home; and when you eat your dinner you sit at a *table* and eat off a *plate* with a spoon, or knife and fork; at night you sleep upon a *bed*, and in the morning when you get up, you put on some *clothes* to keep you *warm*. Now, all these things must have been made by *somebody* and out of *something*. The chair and stool and table were made by a? *carpenter*, and of? *wood*. The plate by a? *potter*, and of? *clay*. The knife and fork by a? *cutler*, and of? *metal*. You see all these things are made by man, but did man make the wood, the clay, or the metal? Oh no! they were all created or produced by the power of God. When you look at this beautiful world, and all the things in it which are given us for our use and pleasure, do you not feel that some great Being whom we can not see must have made all? Yes, dear children, you know it was Almighty God. He called into existence this wonderful world on which we *live*, the *sun* and *moon* and *stars*, which altogether we call Creation or the Universe. I will now begin to tell you the way in which God did this. Do you think He had need of any thing to make the world with? No; he only *spoke* and it was done! Can any one else make things by speaking? No. You are right; it is only Almighty God who can do such a wonderful thing. We are told that at first "the earth was without form and void, and darkness was upon the face of the deep;" that means, that the earth was without any agreeable shape or order, and that it was empty. There were no nice trees or plants to furnish it, nor beautiful lakes and mountains and valleys, nor animals to inhabit it. First of all, God made the light. He said, "Let light be, and there was *light*." Then he made the air and sky, or firmament. Can you see the air? No; but you can *feel* it. Do you know where the air is? It is every where; it covers the whole *earth*. Sometimes water comes down from the clouds; what do we call it? *Rain*. Now, God said, "Let the waters that are under the heavens be gathered together into one

place, and let the dry land appear." What did God call the dry land? *Earth.* What did he call the waters? *Seas.* But there was as yet nothing on the earth or in the waters; so God spoke, and things grew out of the ground; trees, with their beautiful leaves and fruit; nice vegetables, and corn, and soft green grass, and lovely flowers, all sprang up at his command. How thankful we ought to be when we remember that God made all these things for us! Next, God placed two great lights in the sky, the greater light to rule the day, and the lesser light to rule the night, and covered the sky with stars. What did he call the great light? The *Sun.* And what the lesser light? The *Moon.* None of these things which God made were alive. At last he made some living things. He filled the water with *fishes*, some very large, and some of them very small. Then He made the beautiful birds to live in the trees, and some to swim on the water, and He made all the creeping things, and the beasts of the earth according to their kinds, and cattle, and every thing that creepeth on the earth after its kind; and last of all He made man, and gave him dominion over the fishes of the *sea*, and the fowls of the *air*, and the *beasts*, and the whole *earth;* and God saw all the things that he had *made*, and they were very good.

Now, let us try to consider what was created on each day. The first day God made the *light.* On the second day, the *air* or *firmament.* The third day He formed the *seas* and the *dry land*, and made the *grass*, *herbs*, and *trees.* On the fourth day God made the *sun* and *moon* and *stars.* On the fifth day, the *fishes* and *birds;* and on the sixth day He made the insects, reptiles and *beasts*, and also *man.**

Life.

Let us think of God's goodness in granting life to all his creatures. When we awake in the morning, and feel that we are *alive*, how pleasant it is to see the bright daylight, and to breathe the fresh morning air! Then little children sit down to their morning meal, and hear their kind parent's voices; and when hunger and thirst are satisfied, they prepare to go to school, there to learn many good and useful things, and to spend an hour in pleasant play; tired at last, they go home to meet their dear parents once more, and then, when the sun has set and darkness covers the sky, God sends sleep to rest our bodies and to give us strength for a new day. How thankful we should be for these great blessings!

But are there no people living except those we have seen? Oh yes. Thousands of thousands of men and women and little children are now enjoying life in many other countries. Some are black, some are white like ourselves, but God supports the life of every one. And are *men* the only living things? No; for the beasts in the field live, and so do birds and fishes, and the little insects. Who could count all the living things God has made? No one could number them, they are so many. Could a *man* cause any thing to live? No; God only could do that. Men can make many wonderful things, such as a watch, to tell the time; in it the wheels keep moving, with a ticking sound; but then, if it is not wound up it will stop; it is not *alive.* What is it in our breasts which beats night and day? It is the heart, which keeps on moving as long as we live. Does any one touch it to make it beat? No; it is alive. We can not stop it or make it move. We may call the heart the life-clock; it will go on beating until we die.

How many wonderful parts the body has, in order to support life. The head is at the top; it turns about on the neck. Inside the head is the *brain*, where we feel; in front is the face, with eyes to see, nose to smell, mouth to taste and speak with. At the sides of the head are the ears to hear with. The head seems to govern the body. Then, inside the chest, besides the heart are the lungs, by which we breathe air to keep our blood pure; and below is the stomach, to digest the food we eat, and change it into nourishment for the blood, which the heart sends to all parts of our frame. Then we have hands and arms to work and get food, and to do many other things. Our feet and legs carry us about from place to place, just as we wish, which is a most useful thing. But we must now think of another wonderful part of life; I mean that it is always changing. You are little children *now*, soon you will grow to be big boys and girls; then your bodies will be larger, and your minds will know much more. At last you will become men and women, and then you will not grow any more, but will change gradually

* The words in italics are to be supplied by the children.

to be old people; your strength and your senses will decay, and at last you will die, and new children will grow up to take your places in the world; for this is how God made all living things, both men and animals and plants. When a seed falls into the ground, it swells and grows: at first a little green shoot appears, then, after many years perhaps, it becomes a large tree, and bears flowers and fruit and seed. At last this tree grows old and dies. Will God ever die? Oh no! He is a spirit, and spirits do not die, they live forever. *Our spirits* will not die, only our *bodies*. The angels do not die; but all things which we see on the earth will die; they come to life, and grow, and live, and then die. Some things never had any life; stones and metals never were alive; they are called minerals. But living things could not do without those which have no life. What do we want that has no life? We want air to breathe, and water to drink; without these we should not live a day, and so God in his love has given us both in abundance. The air is every where over the earth; we live in it, and breathe it; so do plants and animals; but there is enough for the use of all. And how plentiful is water! it drops in the rain and dew, it flows in rivers and streams, and the great ocean is full of it. The minerals of the earth serve for the plants to grow in, and the plants serve to feed men and animals; so you see all things help to support life, and all life comes from God. We should thank and praise Him every day for all his blessings.

The Mind.

Some of you, little children, may have observed how many wonderful things animals can do. You may have seen a bird's nest, and noticed how neatly and curiously it is made; or you may have looked at a little spider weaving his web. There is one kind of bird that sews leaves together to form its nest, and for this reason it is called the Tailor bird; and you have all heard of the Beaver, that cuts down trees and builds himself a house and a wall on the river side. But animals do all these wonderful works without being taught; for God has given to them what is called instinct, by which they know just what to do. To the beaver He has given a building instinct, to the spider a weaving instinct, and so on. Yet animals can learn to do some things. Dogs are trained to mind sheep, and horses to draw carriages. Some birds can be taught to sing tunes, or even to say a few words; but no animal can learn like a child; for the same child may be trained to be either a weaver, a tailor, or a builder, or to any other trade. Why is this? You know that many animals have five senses like ourselves; but can any animal learn to speak like a child? Oh no! for God has given the power of speech to man only. When God created the animals, he brought them to Adam for him to give each a name; and you know that we have names for every thing we see or know of, and for whatever we do. When we hear the name of a thing, we think of the thing itself; and when we want to tell what we have seen, we use words only. With words we can tell whatever we feel, or think, or know; and by listening to what others say, we can learn from them. Words stand for things. We think, speak, read, and write in words. Whether we think, speak, or write the word *man*, it always stands for the same thing. We learn to know things through our senses: this is called *perceiving*. When we once know any thing, we can think of it again: this is called *remembering*. How do you know the difference between one object and another? By *comparing* them. Can you tell me which is the taller of these two children, the boy or the girl? *The boy.* Which is the elder? *The boy.* How do you know? Because he is much bigger. Yes; you have observed that children increase in size as they get older, and so you *judged* of their ages by their difference of size. In this way we can judge of the differences of all things, and by reasoning on their qualities we learn to know their uses. We can judge of *actions* as well as of *things*. We all know that to get our food and clothes, some one must work. Little children can not work, but their parents labor for them. Now, when we see people who are idle all day, we say that they do wrong, and that they soon will come to want. Why do we say this? Because we know that much labor is needed to prepare food and clothing for our use; and if men are idle, others will not give them what they want. It is by our *minds*, then, that we are able to tell right from wrong. And God requires us to think on what we do, and to obey his laws. Does He require the animals to reason on what they do? No; for He has not given them speech and reason like man.

Let us think of another power in our minds. We said that by means of our senses we can perceive whatever is around us; but we can sometimes think of things we never saw: this is called *imagining*. Let us try to imagine a palm-tree. I show you this picture to help you to imagine it. Now you must think of a tall straight tree, growing upright, with no branches at the sides, and only one great bunch of leaves at the top. Now look again at the picture; fancy the stem as tall as an elm-tree; the leaves at the top each as long as this room is wide, and a great bunch of fruit in the middle of the leaves. Have you any idea of the palm-tree now? How did you get it? Yes; from the picture, and by what you know of other trees, and by my description. Let us now see how many mental powers we have found out. We can perceive; we use signs or language; remember; compare; judge; imagine. What a wonderful thing is the mind! It is said that God at first made man in his own image; that is, He gave him a thinking spirit or soul, and made him pure and good. Two things our minds can learn about God; how well he has made all things, and how merciful he has been to man, who sinned against him. When we think of these things, it should make us love him more and more every day.

Conscience.

Almighty God has made the great world and all living things, down to the smallest insect, on a regular plan; even the water and air and light obey his laws, and he has put an instinct in every animal, by which it does that which is good and right for it to do. Have *we* the same instinct in us? No, but we have what is much better, a mind which can judge between right and wrong. How do we know what is right? God has given us a law which tells us. Is this law good? Yes; for God made it, and He does all things well. Those who keep this law are happy, while those who break it are unhappy.

The feeling which we have of what is right or wrong in our actions is called *conscience;* and although no one might see us when doing a wrong act, conscience would tell us we were not doing as we ought. We should always listen to conscience. We should always do what we know to be right, not what we see others do. Children often try to excuse themselves when in fault, by saying that they only followed the example of some of their companions: is this right? No; for we should not join in any act without first thinking if it be right to do so. Do you know what you *ought* to do? The great thing is to love and serve God; the next, to love your fellow-creatures, and do them all the good you can. Do you know what it is wrong and wicked to do? Is it right to hate any one, or to try to injure him? Is it right to give way to anger, greediness, and other passions? No; for we should try to govern our minds and obey God's law, and not our own bad feelings. Ought we to say what is not true? No; for God is not pleased with those who lie. May we be rude or disobedient to our parents? No; we are commanded to obey them in all things. Can children serve the Lord? Yes; Joseph, the prophet Samuel, king Josiah, Timothy, and many other holy men, sought the Lord while they were yet children; and he led them all through their lives in the right way; and *we* must try to learn how to be good. We can not do this all at once. Many little children who are naughty when they first come to school, learn by degrees to do what is right. Will *you* strive to improve? You must try very much, and not be discouraged; endeavor always to find out which is the right way to act. I will tell you about a poor American Indian who was among his white neighbors. He asked a white man to give him a little tobacco. The man had some in his pocket, which he gave him. When the Indian came to use the tobacco, he found a piece of silver money in it; so, the next day he came back and brought it to the owner. When asked why he did not keep the money, he pointed to his breast and said, "I got a good man and a bad man here: the good man say, 'it is not yours, take it back.' Bad man say, 'he gave it you; it is yours.' Good man say, 'it is not right; he gave you tobacco, not money.' Bad man say, 'never mind; you got it, go and spend it.' So, I don't know what to do, and I try to go to sleep; but good man and bad man keep talking all night, and trouble me; so I bring the money back, and feel good now." What did the Indian mean by the good man in his breast, who said, take back the money? He meant his conscience, which told him right from wrong. What was the bad man that told him to keep the money? This was the feeling of selfish greediness, which would have had him buy something for his own pleasure with the money.

Not long ago I saw a little girl come into school one morning; she put her own bread away, and then took some out of another child's bag. As soon as she had got it in her hand she hid it under her cloak, and looked timidly around to see if any one was near. I went to her, and asked her where she got the bread then in her hand. She said, from her own bag. Was this true? No; for I saw her take it from another bag which was now empty. What made her hide the bread, and look round to see if any one noticed what she had done? It was conscience. She knew that she had done wrong: in her own bag she had plenty of bread, but she was greedy and wished for more. This was a sad fault, it led her to steal; and then, to hide her theft from me, she spoke what was false. See how one fault leads to another: covetousness to theft, and theft to lying! But I am glad to say, she soon came to see how badly she had acted, and to be very sorry for it. Perhaps she did not think much of what she was doing, but only followed the bad feeling of greediness; yet she knew that she was doing wrong, or why did she try to hide the bread, and then tell an untruth to conceal her fault? Let us always think of what we are doing, and try to act rightly. Even the poor Indian who had not been taught the true way, wished to be honest; and how much more should we who have the law of God.

Hope.

What a delightful feeling is hope! I think we may call it a bright feeling. You may have seen the farmer laboring to plow and sow his fields. Why does he throw the seed into the ground? Is it not that he *hopes* to see it grow up and bear fruit? He waits long, and is not impatient; for he says to himself, "When harvest time comes, I shall be rewarded for all my labor and cost; I will wait and *hope* until then." When a merchant sends out a ship laden with goods over the ocean to a far country, he says, "My goods cost me much, but when my ship comes back, I *hope* she will bring me many more valuable things in return."

If a mother were parting from her son who was going on a long voyage, she would say, "It is, indeed, sad to part, but I will live in *hope* that my child will return, and then what joy I shall feel to meet him again!" Do you, children, ever feel *hope?* When you have a lesson given you to learn, you may perhaps say, "It is rather hard, but never mind, I think I can learn it." If you thought you could not learn it, you would have no *hope*, and be very sad.

When you bid your mothers good-by in the morning on coming to school, you do it cheerfully, because you say, "In the evening we shall meet our dear mothers again." If you had not this feeling, how miserable you would be.

You all wish to walk abroad and play in the fresh air; think how you would feel when shut up in a prison, with strong stone walls and iron-bound doors, so that you could not get out, and only saw the light through one small grated window. Yet, if you expected to be let out in a month, a year, or any fixed time, you would still live in *hope*. Perhaps you might say, "It is very hard to be so long in this dark, cold cell; but, oh! how happy I shall be when the day comes, to go out and breathe the fresh air again." Think, then, of those poor prisoners who have been shut in for life, with no hope of liberty. Oh! how sad their fate must have been! no change, no hope in this world! Some have given way to despair, and even gone mad in their dungeons. Others have trusted in God, and borne all patiently, placing their hope on a better world. Think, then, my dear children, what a blessing hope is; how many happy thoughts it gives us; how cheerful we are, and how much we can do, if we have a hopeful spirit. With this feeling our faces are bright, our hearts are light, and our hands are active and busy; so let us always try to *hope*, and never despond or despair.

The foregoing are merely given to show how these subjects should be simplified to suit the capacities of little children. It is a good plan for teachers, when they intend giving a lesson of this kind, to draw out beforehand an outline of the manner in which they mean to treat the subject. We give an example or two.

Love.

In treating this subject, the first leading idea to be brought out is love to God

for all his boundless goodness to us, and for his infinite perfections. Next, love to parents as a duty commanded, as a return for their unbought care and affection, and for constant benefits. The ties of relationship should then be dwelt upon; the duty of brotherly love and of general union in families, with simple anecdotes illustrative of the happiness and beauty of family union. Then duties of humanity in general, and of kindness and hospitality to strangers; with such narratives as Abraham entertaining the angels; the parable of the merciful Samaritan; the story of Mungo Park entertained by the poor African women; the divine command to love our enemies, and to overcome evil with good, illustrated by the example of the Saviour praying for his murderers.

The foregoing principles may be contrasted with examples of the dreadful effects of hatred, and of the misery of quarreling and anger. Inculcate, also, kindness to animals, and frequently show their uses both to man and in the scheme of creation. Also show the cruelty and cowardice of giving pain to weak and helpless things, which are placed by Divine Providence under our protection. Try to cultivate a love for natural objects generally; flowers, trees, and so forth. As children come to perceive and admire the beauty and order of creation, a feeling of love extends itself to every natural object, as exhibiting the power and goodness of God.

Fear.

Show the evil and folly of indulging in unnecessary alarm at common dangers or mere appearances. Try to strengthen the minds of children to meet dangers, by directing them how they should act in such ordinary occurrences as may excite alarm. Explain what is meant by *moral* courage, and show how *fear* is generally accompanied by guilt, and that innocence gives the best feeling of security. Try to induce a constant dependence on divine protection. Explain that the feeling of fear or insecurity in darkness arises from physical causes, such as the impossibility of seeing where to step, and show how the blind overcome this feeling.

Additional Subjects for Moral Lessons.

On the continual support of all things by Divine Power.

Time.—Our experience and knowledge of the *past*, the duties of the *present*, and our ignorance of the *future*.

The design and wisdom shown in the works of creation.

The starry heavens; the idea of distant worlds.

The stages of life, and their mutual relation and duties: infancy; youth; maturity; age.

On the various ranks and occupations of men, and of their mutual usefulness and support.

Love to God—to parents and relations—to companions—strangers and enemies.

Fear.—Physical and moral.

Truth and justice in our words and actions.

Falsehood, dissimulation, and evil speaking.

Obedience.—Explain the difference between *willing* obedience and *forced* obedience.

Contentment, and submission to unavoidable evils.

Patience and perseverence under difficulties.

Gentleness both in *word* and *action*.

Selfishness contrasted with self-denial for the good of others.

Industry and diligence.

Self-control—in sudden alarm or cases of illness—of provocation.

Generosity—covetousness.

Self-conceit, and a spirit of contradiction.

Effects of envy—anger and hatred.

Cruelty to animals.

Cleanliness.

The tendency of one fault to give rise to another.

Respect due to parents—to age—to good and great characters—to office and to rank.

The evil of ridicule. Forbearance and sympathy due to misfortune and deformity.

Punctuality. Destructiveness. Order. Honesty.

Loyalty and love of country.

XII. EARLY ILLUSTRATED SCHOOL BOOKS.

We shall avail ourselves of recent applications of Photography to transferring engravings to electrotypes, ready to be used in ordinary type printing, to give our readers exact impressions from the illustrations of some of the earliest school books. We have before us a little book of about the size of the "*New England Primer Improved*," with the following title,

"A Guide for the Child and Youth, in Two Parts. *The first for Children:* containing plain and pleasant directions to read English; with Prayers, Graces, and Instructions, fitted for the capacity. *The second for Youth:* Teaching to write, Cast Accounts, and Read more perfectly; with several other Varieties, both pleasant and profitable. By T. H., M. A., Teacher of a private school. London: 1762."

In his Address "to the Parents, or others," Mr. T. H., says: "When I consider how Ignorance of late had prevailed amongst the Vulgar, and how those who never learned anything themselves, will yet pretend to teach others; I was almost at a loss whether I should proceed in this small but useful Tract. But since a blessed Sunshine hath appeared in our Horizon, I resolved to publish it for the use and Benefit of Children, and those of riper years." This is followed by "*The Capital Roman Letters;*" "*The Small Roman Letters;*" "*The Vowels;*" "*The Consonants;*" "*Double Letters;*" "*The Great Italick Letters;*" "*The Small Italick;*" "*Syllables, ab, eb, ib, ob, ub,* and *ba, be, bi, bo, bu, by, &c.;*" which is followed by a page of "The Dutiful Child's Promises," viz.:—

"I will fear God and honour my King.
I will honour my Father and Mother.
I will obey my Superiors.
I will submit to my Elders.
I will love my Friends.
I will hate no Man.
I will forgive my Enemies, and pray to God for them."

Then follows the illustrated Alphabet for "*The Child's Guide*," which is again introduced as "*The Youth's Guide*," with extracts mainly from the Bible. We combine the two in the following pages. The illustrations, as well as the rhymes, were either copied from, or suggested by "*The New England Primer Improved*," or else introduced into the latter from "*The Guide*," or else both were copied or suggested from an earlier original, which we have not the facilities at hand for determining. The illustrations were copied for this Journal by the *American Phototype Company*, whose office is in Leroy Place, Bleeker Street, New York.

The Child's Guide.

A.

In *Adam's* Fall,
We sinned all.

B.

This *Book* attend,
Thy Life to mend.

C.

The *Cat* doth play,
And after slay.

D.

The *Dog* doth bite
A Thief at Night.

E.

An *Eagle's* flight
Is out of sight.



The Youth's Guide.

And *Adam* called his Wife's Name *Eve*, because she was the mother of all living.

Be ye doers of the *Word*, and not hearers only, deceiving your own Souls.

Every Creature of God is good; and by him were all things *created*.

A living dog is better than a dead Lion.

Riches make themselves Wings, they flee away as *Eagle* towards Heaven.

F.

The Idle *Fool*,
Is whipt at School.

G.

As runs the *Glass*,
Man's Life doth pass.

H.

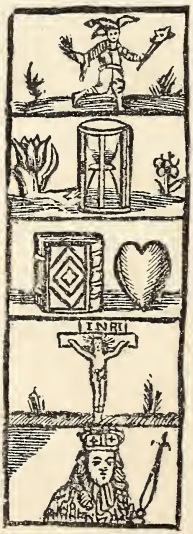
My *Book* and *Heart*
Shall never part.

I.

Jesus did dye,
For thee and I.

K.

King *Charles* the Good,
No Man of Blood.



The Heart of a *Fool is* in his Mouth; but the Mouth of a wise man is in his Heart.—*Sirach.*

Nothing is more precious than *Time*, yet nothing is less esteemed of.—*Bern.*

Blessed are the pure in *Heart*, for they shall see God.

At the Name of JESUS every Knee shall bow.

Is it fit to say to a King, Thou art wicked? And to Princes, Ye are ungodly?

The Child's Guide.		*The Youth's Guide.*
L. The *Lyon* bold, The *Lamb* doth hold,		The Wicked flee when no man pursueth, but the Righteous are bold as a *Lion.*
M. The *Moon* gives Light, In time of Night.		The LORD hath appointed the Moon for Seasons.
N. *Nightingales* sing, In time of Spring.		The time of singing of *Birds* is come.
O. The *Royal Oak* our King did save From fatal Stroke of Rebel Slave.		Howl, O ye *Oaks* of *Bashan.—Zech.* i.
P. *Peter* denies His Lord, and cries.		And *Peter* remembered the words of JESUS, which he said to him, Before the cock crow thou shalt deny me thrice. And he went out, and wept bitterly.
Q. Queen *Esther* came in Royal State, To save the *Jews* from dismal fate.		When the King saw *Esther* the Queen, he held out the golden Scepter which was in his hand.
R. *Rachel* doth mourn For her first-born.		In *Rama* was a voice heard, ——— *Rachel* weeping, &c.
S. *Samuel* anoints Whom God appoints.		*Samuel* took a vial of Oil, and poured it on *Saul's* head, and kissed him.
T. *Time* cuts down all Both great and small.		*Time* and Patience teach all men to live content: or *Time* is life's best Counsellor. *Arist.*
U. *Uriah's* beautious Wife, Made *David* seek his Life.		When the Wife of *Uriah* heard that her Husband was dead, she mourned, and afterwards she became *David's* Wife.

The Child's Guide.

W.

Whales in the Sea
God's Voice obey.

X.

Xerxes the Great did die,
And so must you and I.

Y.

Youth's forward slips
Death soonest nips.

Z.

Zacheus, he
Did climb the Tree
His Lord to see.



The Youth's Guide.

God created great *Whales*, and every living thing that moveth.

The *King's* heart is in the hand of the Lord, as the Rivers of Water, he turneth it whithersoever he will.

Wherewithal shall a *young man* cleanse his way? by taking heed thereto according to thy Word.

There was a rich Man among the Publicans named *Zacheus;* the same sought to see Jesus, but could not for the press, because he was low. So he ran and climbed into a Sycamore-tree.

THE CHILD'S BEHAVIOUR FROM MORNING TO NIGHT.

First in the Morning when thou dost awake,
To God for his Grace thy Petition make.
Some heavenly Prayer use daily to say,
And the God of Heaven will bless thee alway.

Child, after thou hast prayed to God for his Assistance, observe these following Rules.

Down from thy Chamber when as thou shalt go,
Thy Parents salute & the household also.
Thy Hands see thou wash, thy Head also comb;
Keep clean thy apparel both abroad and at home.
This done, thy Satchel, & thy Books take;
And to the School haste thou do make.

At going to School.

In going your way, and passing the street,
Thy Hat put off, salute those you meet.
When to the School thou shalt resort,
Salute thy Master, I do thee exhort:
Thy fellows also, in token of Love,
Lest of unkindness they thee reprove:
Learn then in thy youth, for it is too true,
It will be too late when Age doth ensue.
If thou doubt any thing, desire to be told;
It is no shame to learn, be thou never so old.
When from School you shall take your way,
Make haste to your home, and stay not to play:
The House then entering, in the Parents presence,
Humbly Salute them, with due reverence.

At the Table.

When down to the Table thy Parents shall sit,
In place be ready for purpose most fit.
Be meek in thy Carriage, stare none in the Face;
First hold up your Hands, and then say thy Grace.
The Grace being said, if able thou be
To serve at the Table, it will become thee.
If thou canst not wait, presume in no case,
But in sitting down, to your Betters give place.
Suffer each Man first served to be;
For it is a point of great courtesie.
Let not thy Tongue at the Table walk;
And of no matter either jangle or talk;
For *Cato* doth say that in old and in young,
The first step to Virtue is to bridle the Tongue.

In the Church.

When unto the Church thou shalt take thy way,
Kneeling or standing to God humbly pray.
A contrite Heart he will not despise,
But doth account it a sweet Sacrifice.
Unto him thy Sins Shew and confess,
Asking for them Pardon and Forgiveness.
Then ask thou in Faith, not doubting to have,
And thou shalt receive that which thou dost crave,
More merciful he is than Tongue can express,
The Author and Giver of Grace and Goodness.
In the Church comely thy self well behave;
Sober in carriage, with countenance grave.
The Lord doth call it the House of Prayer.
It must not be used as a Market or Fair.

XIII. AMERICAN TEXT-BOOKS.

It is difficult to over estimate the importance of Text-Books, in the external or internal economy of education—in the magnitude of the pecuniary interests involved to publishers, authors, and parents, as well as the right performance of the work of instruction by teachers and pupils in schools of every grade. In this and subsequent numbers of the Journal, we purpose to contribute something toward a fuller understanding of the growth and condition of this great interest in this country,—both in its material and its scholastic aspects—of the manufacture and illustration of books, and of the principles and methods applied to the development of particular subjects, as well as of the modes adopted to secure their introduction into particular schools, cities, and states. Although the subject will not be treated regularly in this order, when our review is complete, it will be found to embrace—

I. Authors and Books. A catalogue of authors, including the name of the author, or editor, so far as can be ascertained by the compiler, of every publication, that has been used, or prepared for use as a text-book in this country, with the title, edition, place and date of publication of each work.

II. Subjects. A catalogue of the same books and authors, included in Part I., arranged according to the subject upon which they treat—or at least an index to the authors who have treated of each subject.

III. Publishers. A catalogue of publishers, who will furnish a complete list of the text-books which they have issued, classified by authors and subjects, and which they are now prepared to furnish.

IV. A review of the plan—the principles and development, on which the text-books most in use are prepared, with a comparison of the merits of a few of the principal text-books on the same subject.

V. The results—"the Odds and Ends" of some study, incidental and accidental, as well as designed, as to the origin, illus

trations, authorship, real and claimed, and the religious and political tendencies and aims—apart from the specific and avowed purpose, of certain school books.

VI. Suggestions as to the preparation, and manufacture, and introduction of school books, in reference to the interests of purchasers, teachers, and pupils, as well as of authors, publishers, agents, and venders generally.

PART I. AUTHORS AND BOOKS.

The catalogue of authors and books, of which we commence the publication in this number, was originally intended to embrace the Text-Books in the compiler's own collection, but has been extended to include all of American authorship, publication, or use, of which he has been able to obtain any information. This information, in many instances, is very imperfect and unsatisfactory, but will at least serve as a clue to further inquiry.

The books, to whose title a single asterisk (*) is annexed, as also the editions, whose dates, or places of publication are placed within parenthesis ( ), are not in his possession. Of each of these books the compiler would be glad to obtain a copy, by exchange of duplicates in his possession, which are indicated by a double asterisk (**).

No dates are abbreviated unless later than 1800. Other abbreviations will need no explanation.

Much pains has been taken to secure correctness and completeness. Many errors, however, and omissions will doubtless be detected in regard to those books, which the compiler has not seen, and whose titles, dates, and places of publication, and authorship have been gleaned from numerous sources, not always reliable.

Corrections and additional information are solicited. To any collector, author, or publisher, who will signify a wish to see the list under any letter of the alphabet, before it is published, that it may be made to include a correct entry of every school book under that letter in his possession or knowledge, an impression will be forwarded, before it is printed, and any addition, or correction returned will be entered, before the same is published.

All communications relating to this subject can be addressed directly to the "*Editor of the American Journal of Education*," *Hartford, Conn.*

AMERICAN TEXT-BOOKS.

PART I. AUTHORS AND BOOKS.

A.

ABADIE & SONS,
A French Grammar, Philadelphia, 1 edition, 1823.
ABBOTT, GORHAM D.,
The English Spelling Book, (*Anon.*,) New York, 1847, (1849.)
ABBOTT, JACOB,
The Little Philosopher, Boston, 1833 ('55.)
The Little Learner—To Talk, New York, 1855.*
" " To Think, New York, 1856.*
" " To Read, New York, 1856.*
" " Common Things, N. Y., 1856.*
" " Right and Wrong, N. Y., 1856.*
Elements of Astronomy, New York.*
Mrs. Markham's History of France, New York, 1859.
Narrative of General Course of History, (Harper's School History.) New York 1860.
Philosophy. See *John Abercrombie.*
ABBOTT, MESSRS. (*J. & C. E.,*)
The Mt. Vernon Reader, Junior, Boston, 1842, (N. Y.)
" " " Middle, New York, 1835.**
" " " Senior, Boston, 1840.
ABBOTT, J. & C. E.,
The Mt. Vernon Arith., Part I., N. Y., 2 ed., 1846.**
" II., N. Y., 1847.*
Addition Columns, N. Y., 1846, 1847.
ABBOTT, J. S. C.,
The Young Astronomer, N. Y., 1 ed., 1846, 1847.
ABBOTT, J. & J. S. C.,
Common School Drawing Cards, three Sets, N. Y.*
Drawing Cards, ten Series, N. Y.,*
ABEL, F. A., & C. L. BLOXAM,
Handbook of Chemistry, Philadelphia, 1854.*
ABEL, THOMAS,
Subtential Plane Trigonometry, Philadelphia, 1761.*
ABERCROMBIE, JOHN,
Inquiries concerning the Intellect. Powers, New York, (1832.) '60
Same, edited by J. Abbott, Boston, 1835, 1845, 1846, N. Y., 1849; (Phila.; Hartford, 1833.)**
Essay on the Intellectual Powers, N. Y.*
Intellectual Philosophy, Philadelphia.*
Philosophy of the Moral Feelings, N. Y., (1834.) '58.
Moral Philosophy, ed. by J. Abbott, Boston, 1836; N. York; Phila.*
ACCUM, FREDRICK,
Chemical Amusement, edited by T. Cooper, Philadelphia, 2 edition, 1818.
System of Theoretical and Practical Chemistry, 2 vols., Philadelphia, 1808.*
ACHAINTRE, N. L.,
Satires de Juvenal, tr. par J. Dusaulx, Par., 10 ed., 1826.
ACKERMAN, A.,
First Book of Natural History, N. Y., 7 ed., 1847.
ADAM, ALEXANDER,
Summary of Geography and Hist., London, 2 ed., 1797.
Roman Antiquities, ed. by Wilson, N. Y., 1819; (2 ed., 1814, 1826; Philadelphia, new edition, 1858.)
Rudiments of Latin and English Grammar, Edinburgh, (1772,) 4 ed., 1793. Boston, 1 ed., 1799, 2 ed., 1803, Alb. 1 ed., 1820, N. Y., 2 ed., 1820, (3 ed., 1826, '31, '39, New Hampshire, 1825.)**
edited by J. D. Johnson, N. Y., 3 ed., 1838, '39.
new edition by W. W., Cam.*
abridged by W. Biglow, (Elements of Latin Grammar,) Boston, 2 edition, 1811.
Rudiments of Latin Grammar, Troy, 3 Am. ed., 1806, 2 ed., 1809.
edited by C. D. Cleveland, Hartford and Phila., 1836, (Phila., 1847.)
simplified by A. Fiske, N. Y., 2 ed., 1824.
revised by E. Fitch, Troy, 4 ed., 1814.
improved by B. A. Gould, Boston, 1825, '27, '30, '31, '35, Northampton, 1844.
revised by D. Patterson, N. Y., 1833.
abridged by W. Russell, N. H., 1824, 2 ed., 1825.
" by Wells, Boston 1843.*
abridgement, with corrections, &c., Boston, 1824.*
Compendious Dictionary of the Latin Tongue, Edinburgh, 2 ed., 1814.
ADAMI, C.,
Commentar zu den Relief- und Karten-Globen, Ber.,'52.
ADAMS, CHARLES,
English Grammar, Boston 1 ed., 1838.*
ADAMS, C. B.
Geology. See *Gray & Adams.*
ADAMS, DANIEL,
Understanding Reader, Worc., 5 ed., 1804, (Bost., 1819.)
Monitorial Reader, Concord, 1841.*
The Agricultural Reader, Boston, 1824.*
Thorough Scholar, (English Grammar,) Leomin[s]ter, Mass., 1803, Montpelier, 3 ed., 1814, 4 ed., 18[2]
Geography, Boston, 1 ed., 1814, 3 ed., 1818, 4 ed. (11 ed., 1829.)
Atlas to do., Boston.*
Improved Atlas, Boston.*
Primary Arithmetic, Boston, N. Y., K[e]
Scholar's " (Leominster, '05.) [1]818.) 1824.
New Arithmetic, Keene, (1827,) '28, '29, '36, '40, 41, n. d., revised ed. n. d., N[ew] (Boston, Worcester.)
Key to do., Boston, New York, Keene, Worc[ester]
Improved Arithmetic, New York.*
Key to do., New York.*
Book-keeping, New York.*
Mensuration, &c., Boston, N. Y., Keene, Worcester
ADAMS, E.,
English Grammar, Leicester, 1 ed., 1806, 5 ed., '21.*
ADAMS, FREDERIC A.,
First Book in Arithmetic, N. Y., 1849, Philadelphia.*
same in French, by E. Cammont, N. Y., 1855.*
Arithmetic, Lowell, 1846, 1848, Philadelphia, revised edition, 1851.
Key to do., Philadelphia.*
The Octave Staff, Diatonic and Chromatic, N. Y., '51.*
ADAMS, F. A., G. F. ROOT, & J. E. SWEETSER,
Singer's Manual, for Teachers, &c., N. Y., 1849.*
ADAMS, GEORGE,
Lectures on Natural and Experimental Philosophy, 4 vols., Phila., 1806.*
ADAMS, HANNAH,
Abridgement of Hist. of New Eng., (Dedham, 1799;) Bost., 2 ed., 1807.
ADAMS, HENRY W.,
Geographical Assistant, Middletown, 1840.
ADAMS, JASPER,
Elements of Moral Philosophy, N. Y., 1837, Cambridge, 1837.*
ADAMS, JOHN QUINCY,
Lectures on Rhetoric and Oratory, 2 vols., Cam. '10.*

ADAMS, J. S.,
Dictionary of Musical Terms, Boston.*
ADAMS, SOLOMON,
Questions on Jarvis' Pract. Physiology, (no imprint.)*
ADAMS, W. T.,
Universal Speaker. See *Calkins & Adams.*
ADAMS, WILLIAM,
Elements of Christian Science; Treatise on Moral Philosophy, Phila., 1850.*
ADAMSON, J.,
Princ. of Eng. Grammar, Manual for S. Afric. College, Cape Town, 1846.
ADDICK, BARBARA O.,
Elements of the French Language, N. Y.*
ADDINGTON, S.,
Orthographical Expositor. See *Jaudon, Watson & Addington.*
ADLER, G. J.,
Ollendorff's New Method of German, N. Y., (3 ed., '46,) 8 ed., 1850.
Key to do., N. Y., 1850.
Progressive German Reader, N. Y., 1851.*
German English and English German Dictionary, N. Y., (in 2 vols., 2 ed., 1849;) 4 ed., 1856.
same abridged, N. Y.,*
Handbook of German Literature, N. Y.*
Practical Gram. of the Latin Language, Bost. 2 ed.*
ADRIAN, ROBERT,
Hutton's Course of Mathematics, 2 vols., N. Y., '16.
Keith's Treatise on the Globes, N. Y., '25, 4 ed., '26.*
ÆSCHINES,
On the Crown, ed. by J. T. Champlin, Cam., '50, '52.*
ÆSCHYLUS,
Tragedies, edited by F. A. Paley, N. Y.*
" translated by R. Potter, N. Y., 1834.*
" translated by T. A. Buckley, N. Y.*
Agamemnon, edited by C. C. Felton, Boston.*
" translated by W. Peters, Phila., 1852.*
Prometheus, edited by Woolsey, Boston, 1837, '43*
" translated, Athens, Ga.*
" and Agamemnon, translated by H. W. Herbert, Cambridge, 1849.*
Septem contra Thebas, ed. by A. Suchtleben, Boston, 1853.*
The Seven before Thebes, ed. by Students of Nassau Hall, 1826.*
ÆSOP,
Fables, Romanized by Phaedrus, (Interl. Tr.,) Lond., 14 ed., 1853.
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AGAR, JOHN,
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AGARD, J. G.,
Naturkunnighetens första Grunder, Stockholm, 3 ed., 1853.
AGASSIZ, LOUIS,
Introduction to Study of Natural History, N. Y., 1847.*
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Principles of Zoology, Part I., Boston, (1848,) revised edition, 1855.
" " " II., Boston.*
AGNEL, HYACINTH,
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AHN, F.,
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New and Easy Method in French, N. Y.*
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AIKIN, ARTHUR,
Manual of Mineralogy, Philadelphia, 1817.*
AKIN, ——,
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Conversations on Practical Arithmetic, Prov., 1830.
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ALBRO, JOHN A.,
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ALCOTT, B.,
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ALCOTT, WILLIAM A.,
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The House I Live in, Boston, 1834, 2 ed., '37, new ed. 1856.*
Laws of Health; Sequel to do., Boston 1856.*
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" " Vol. II., Bost., 8 ed., 1819, (10 ed., 1824.)
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ALDEN, CHARLES H.,
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ALDERSON, JAMES,
Orthographical Exercises, revised by T. Smith, London, 15 ed., 1819, ('24.)
ALDRICH, W.,
Lectures on English Grammar and Rhetoric, Boston, 11 edition, 1847.*
ALEXANDER, ARCHIBALD,
Outlines of Moral Science, N. Y., (1852,) '55.
ALEXANDER, CALEB,
Introduction to Speaking and Writing English Language, Boston, 1794.*
Young Ladies and Gentlemen's Spelling Book, Worcester, 1799.*
Young Gentleman and Lady's Instructor.*
Columbian Dictionary.*
New System of Arithmetic, Albany, (1802,) 2 ed., '06
Grammatical Elements.*
Grammatical System of the English Language, Bost., 1792, 7 ed., '03, ('07,) 10 ed., '11, Keene, 10 ed. 1814, (Salem, 1814).
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New Introduction to the " " Worc., 1795.
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ALEXANDER, JAMES,
Greek and English Lexicon. See *J. Donnegan.*
ALEXANDER, J. H.,
Simm's Treatise on Leveling, Baltimore, 1837.
" " Math. Instruments, Balt. 2 ed., 1844
ALFORD, H.,
Greek Testament, Vol. I., N. Y.*
ALFRED, GEORGE,
Amer. Universal Spelling Book, Staunton, 1 edition, 1810*
ALGER, FRANCIS,
Phillip's Treatise on Mineralogy, Boston, 5 ed., 1844.
ALGER, ISRAEL, JR.,
Elements of Orthography, Boston, 1821.*
Perry's Orthoepical Guide, Boston, (new ed., 1827,) '35.
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" Introduction to the Reader, Boston, 1823.*
" English Grammar, abridg'd, Bost., 1824, ('29,) 1842.
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ALLEN, FORDYCE A.,
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ALLEN, JOHN,
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Elements of English Grammar, Lond., 1813. (2 ed., '24.)
ALLEN, ZACHARIAH,
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The Science of Mechanics, Prov., 1829.*
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ALLIBONE, S. A.,
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Key to do., Philadelphia, 1850.
Elementary Treatise on Algebra, Philadelphia, 1846, 2 edition, 1848, '49.
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Treatise on Algebra, Part I., Philadelphia.*
" on Surveying, Philadelphia, 1857.*
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Latin Prosody, enlarged by Anthon, N. Y., 1824.*
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ANACREON,
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ANDERSEN, R. M.,
Student's Review, Richmond, 1854.*
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Svensk Skol-Botanik, in nine numbers, Stockholm, '52.
ANDERSON, J. J.,
Davenport's History of United States, Phila., 1852.
ANDREWS, C. C.,
Lancasterian Geography, N. Y., 1 edition, 1820.*
ANDREWS, E. A.,
First Lessons in Latin, Boston, (1837, '45,) 19 ed., 1853, 34 edition, 1862.
First Latin Book, Boston, 8 edition, 1858.
Latin Exercises, Boston, 2 ed., 1839.
Key to do., Boston, 1838.
First Part of Jacob's Latin Reader, adapted to the Grammar, Boston, (1837,) 3 edition, 1838, 9 ed., 1844, 10 ed., 1845, ('57.)
Same, adapted to the First Lessons, Boston.*
Synopsis of Latin Grammar, Boston.*
Questions on Andrew's and Stoddard's Lat. Grammar, Boston, 1839.
Freund's Latin-English Lexicon, N. Y., (1851 '55,) '56, 1860.
L'Homond's Viri Romæ, adapted to the Grammar, Boston, 1842, ('51.)
Same, adapted to the First Lessons, Boston.*
Cæsar's Commentaries on Gallic War, Boston, 1845, 1851, Philadelphia.*
Sallust's Jugurthine War, Boston, 1845, N. Haven.*
Selection from Ovid's Metamorphoses, Boston, 1845.*
ANDREWS, E. A., & S. STODDARD,
Grammar of the Latin Language, Boston, (1836,) 4 ed., 1838, 11 ed., 1845, 52 ed., '55, 65 ed., '57.
ANDREWS, H. P.,
Common School Exhibition, Boston, 1849.
ANDREWS, JAMES,
Progressive Drawing Book of Flowers, N. Y., 1846.*
ANDREWS, JOHN,
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Sheridan's Rhet. Gram. of Eng. Language, Phila., 1789.
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Discoveries in Chinese, N. Y., 1854.
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New French Instructor, N. Y., 1855.*
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ANDREWS, S. P., & A. F. BOYLE,
First Lessons in Phonography, N. Y., 1849.*
Phonographic Word Book, No. I., N. Y., 1849.
" Class Book, N. Y., 1850.*
Complete Phon. Class Book, Boston, 1845, (New York, 1848.)
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Compendium of Phonography, N. Y., 1849.*
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Phonographic Charts, Nos. I. and II., N. Y., 1849.*
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Sound Chart of the English Language, N. Y., 1849.*
ANDREWS, WILLIAM E.,
The Catholic School-book, New York.*
ANDREWS, ——,
Greek Grammar. See *Thomas & Andrews.*
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Handbook of French Literature, Philadelphia, 1857.*
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Spelling Book.*
Union Series, Reader No. I., Philadelphia, 1850.*
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" " No. III., " 10 ed., 1838.
" " No. IV., " rev. ed., 1838.
" " No. V., " 1833, '34, '43.
Select Reader, No. VI., " rev. ed., 1833. '34, '36, '40, '43.
Brief System of English Grammar, Providence, 1 ed., 1830, 1850.*
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ANSLEY, E. A.,
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ANSTED, D. T.,
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Zumpt's Latin Exercises, N. Y.*
Introd. to Latin Prose Composition, N. Y. (1849,) '59.
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Latin Syntax, (Latin Lessons, Part II.,) N. Y., 1849.*
Zumpt's Grammar of Latin Language, translated by Schmitz, N. Y., (1849,) '59, 3 ed., 1860.
School Grammar, (same abridged,) N. Y., 1859.
Alvarus' Latin Prosody, enlarged, New York 1824.*
System of Latin Versification, N. Y., (1849,) '50.
Key to do., N. Y., (1849,) '55.
System of Latin Prosody and Metre, N. Y., ('49,) '59.
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Introductory Lessons in English Grammar, Louisville 1845.*
English Composition, Louisville.*
BUTLER, N., & M. STURGESS,
Sallust's Jugurtha and Catiline, New York 1850.*
BUTLER, SAMUEL,
Ancient Geography, Boston.*
Atlas of Ancient Geography, Boston; Philadelphia 1831 '47.*
Geographia Classica, Philadelphia 1847.*
Same, with Questions by Frost, Phila. 1831.*
Atlas of Modern Geography, London new edition 1853.
BUTTER, ——,
Gradations in Reading and Spelling, Phila.*
BUTTMANN, PHILIP,
Griechische Grammatik, Berlin 8th edition 1818.
Larger Greek Grammar, translated by Robinson, Andover 1833; (New York.)
Greek Grammar, translated by E. Everett, Bost. 1822; 2nd edition 1826; 3rd edition 1831.
Greek Grammar, abrid. by G. Bancroft, Bost. '24 ('26.)
BUXTORFF, JOHN,
Manuale Hebraicum et Chaldaicum, Oxford 1807.
BYERLEY, ——,
Spelling Book, Philadelphia.*
BYINGTON, CYRUS,
An English and Choctaw Definer, New York 1852.*
BYRNE, O.,
Practical Model Calculator, New York 1852.*
Mechanics: Principles and Practical Application, New York 1853.*
Method of Calculating Logarithms, New York. *

XIV. BOOKS NOTICED.

THE GRADED SCHOOL. A Graded Course of Instruction for Public Schools: with copious Practical Directions to Teachers, and Observations on Primary Schools, School Discipline, School Records, Self-Reliance, Lessons of Obedience, School Architecture, and Books of Reference. By W. H. WELLS, A. M. New York: A. S. Barnes & Burr. 1863. 200 pages. Price, $1.00.

This little volume is crowded full of practical suggestions and directions for teachers and committees charged with the organization and instruction of Graded Schools—of schools classified according to the attainments of the pupils, where each grade or class constitutes a part of a system, in which the faculties of children are regularly developed by studies and teaching appropriate to their age and progress. These suggestions and directions are not simply the speculations of an ingenious, thoughtful, well read educator, but the last results of a long and varied experience of a teacher and school officer, and of wide observation in the best schools of the country, and of thoughtful study of the best literature of education in the light of that experience and observation, all brought to bear on the practical solution of problems in hand, and in which success, or failure can be seen by teachers and parents directly interested. The suggestions of the writer are sustained or illustrated by frequent references to reports and treatises, where the same topics are thoroughly discussed. These references alone give to this volume a peculiar value—far beyond its cost, to any teacher old or young. We commend the work to every teacher and school officer.

SCHOOL AND FAMILY CHARTS. By MARCIUS WILLSON and N. A. CALKINS. New York: Harper & Brothers.

A MANUAL OF INFORMATION AND SUGGESTIONS FOR OBJECT LESSONS, in a Course of Elementary Instruction, adapted to the Use of the School and Family Charts and other Aids in Teaching. By MARCIUS WILLSON. New York: Harper & Brothers. 1862. 336 pages.

These Charts in style of execution and range of subjects are far beyond anything now before the American public. Bound in a volume they are an ornamental, interesting, and instructive contribution to any family library, and a help to the student and teacher, whether old or young. They should accompany the Series of Readers prepared by Mr. Willson, and should be used with the help of the Manual prepared by the same author.

A MANUAL OF ELEMENTARY INSTRUCTION, for the Use of Public and Private Schools, and Normal Classes; containing a Graduated Course of Object Lessons for Training the Senses and Developing the Faculties of Children. By E. H. SHELDON. New York: Charles Scribner. 1862. 465 pages.

This work is founded on the Manual of Elementary Instruction of Miss Elizabeth Mayo, which was prepared originally as Lessons on Objects for an Infant School, and afterwards adopted in the Model and Training Schools of the Home and Colonial Infant and Juvenile School Society in London. New lessons on Objects, Color, Moral Instruction, and Animals, have been added by Miss Jones, who has had fifteen years' experience in training teachers to these methods in the London schools named above. Other contributions have been made by Prof. Kuisi, who has stood nearer to the fountain head of these methods—the personal teachings of Pestalozzi, than any living teacher among us.

XV. EDUCATIONAL MOVEMENTS.

OBJECT TEACHING.

It is now twenty-four years since, in an address on "School Architecture," we urged on parents and committees to furnish their school-rooms with "Maps, Charts, and Real Measures of all kinds, linear, superficial, solid and liquid, for the exercise of the eye and hand, vases for flowers, native roses, and plants, and cabinets of real objects, as the subjects of oral instruction in the field of the pupil's every day observation and experience." In an address to parents and teachers, first delivered just twenty-five years ago, but repeated in substance a thousand times since, with variations, in more than one hundred of the principal cities and villages of the country, we laid it down as a condition of a successful system of public schools in such cities and villages, that "these schools should be graded" "on the great principle of the equality of attainments, which will generally include scholars of the same age"—"that each school should have but few classes, and that each class should be as large as is consistent with thoroughness of individual examination by the teacher, who should not be distracted by a multiplicity and variety of cares"—"that in every village district there should be a Primary School, furnished with appropriate seats, furniture, apparatus, and means of visible illustration, and surrounded with dry, airy, and pleasant play-grounds, with shelter in inclement weather, and with flower-borders, shrubbery, and shade trees, the uncovered school-room of physical and moral education, and of the manners and personal habits of children,"—that "to teach those schools properly, to train boys and girls to mild dispositions, graceful and respectful manners and unquestioning obedience, to cultivate the senses to habits of quick and accurate observation and discrimination, to teach the use of the voice and of simple, ready, and correct language, and by appropriate exercises in drawing, calculation and lessons in the properties and classification of objects to begin the cultivation of the intellectual faculties," "to do these things and more, required a teacher of a rare union of qualities and qualifications seldom found in one of a hundred of the male sex, and to be looked for with the greatest chance of success among females" "in whose own hearts, love, hope, and patience have first kept school." In looking over the "Manuals on Object Teaching"—"Lessons on Objects"—"Primary Object Lessons"—"Oral Lessons on Social Science"—"Outlines of a System of Object Teaching"—"Child's Book of Nature"—"Model Lessons," &c., &c., published within two years, we are more than ever satisfied that "the world moves," although we have thought that it moves in some directions rather slowly. The danger now is, that teachers will take up the new methods, from Lessons prepared by others, and not wrought out by themselves from principles thoroughly mastered, and adapted to the age and attainments of their own pupils, and to the locality and pursuits of their own neighborhood. Object Teaching can be made as verbal, mechanical, and monotonous, as any other.

AGRICULTURAL SCHOOLS AND POLYTECHNIC INSTITUTES.

It is now twenty-four years since we published in a voluminous Appendix to an official report, an account of the principal Agricultural and Polytechnic Schools of Europe. But we little thought we should ever be able to chronicle such action as that of the United States Government, in granting over 800,000 acres of public lands, to aid the several States in establishing such institutions.

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Engd by Geo. E. Perine N.Y.

S. S. Randall

STEEL PRINTED FOR BARNARD'S AM. JOURNAL OF EDUCATION.

I. SAMUEL S. RANDALL,

SUPERINTENDENT OF PUBLIC INSTRUCTION IN THE CITY OF NEW YORK.

Samuel S. Randall, who for more than a quarter of a century, has been connected with the administration of the system of Common Schools in the State of New York, was born May 27, 1809, at Norwich, Chenango County. After passing through the ordinary district schools of the neighborhood, he was transferred to Oxford Academy in 1823, and, having been fitted for college under the tuition of Rev. Dr. Andrews, now of Binghamton, entered Hamilton College in 1824, then under the presidency of the Rev. Dr. Davis. At the end of the Sophomore year, he left that institution to prosecute the study of the law in the office of Messrs. Clark & Clapp, at Norwich, and in 1830, was admitted to the bar, and practiced the profession for several years in his native town.

In May 1837, Mr. Randall was appointed by the Secretary of State and *ex-officio* Superintendent of Common Schools, Gen. Dix, as a clerk in the department of Common Schools. Gen. Dix was at that time engaged in the preparation and publication of a volume of "*Common School Decisions and Laws*," and this, together with the correspondence of the department, and the examination and decision of appeal cases from the several school districts, required the active services of an efficient clerk, who acted under his constant dictation. During this period, the District Library System was inaugurated and carried into effect. In 1839, Gen. Dix was superseded in the charge of the department by the Hon. John C. Spencer, who immediately upon his accession, with that indefatigable energy, industry, and perseverance, which so eminently characterized him, entered upon the task of a complete revision and modification of the Common School System, in which he was essentially aided by Mr. Randall, whose services were retained under the new organization. By the provisions of the new act, drawn up by Mr. Spencer, and which passed the legislature in 1840, the Superintendent was authorized to appoint a General Deputy, and the Board of Supervisors of the respective counties in the State, were required to appoint

Deputy or County Superintendents, who, under the direction of the State Superintendent were charged with the visitation and examination of schools, the licensing of teachers, and the hearing and decision in the first instance of appeals. Mr. Randall was appointed General Deputy Superintendent, and charged with the general correspondence of the department, which had now become very voluminous, and the examination of cases on appeal from the decision of the County Superintendents. During the administration of Mr. Spencer, the "*District School Journal*," edited by Francis Dwight, Esq., was transferred from Geneva to Albany, and Mr. Randall became a frequent contributor to, and subsequently an associate editor until the death of Mr. Dwight, when the entire conduct of the Journal passed into his hands. In 1842, Mr. Spencer having been appointed by President Tyler, Secretary of the Treasury, Mr. Randall became acting Superintendent, and continued to discharge the duties of that position until the election of the Hon. Samuel Young, in the ensuing year. Col. Young immediately on his accession appointed Mr. Randall General Deputy Superintendent, devolving upon him, without restriction, the entire charge of the department; and although differing in the outset with his predecessors as to the expediency and policy of continuing the County Superintendent System, was induced by Mr. Randall to give the system a fair trial and examination, which resulted in a strong conviction of its excellence and value, and an unalterable determination to sustain and carry it into effect. Under his administration, and through the agency of the County Superintendents, comprising some of the ablest and most intelligent men of the State, the system of public instruction attained an efficiency which has never since been surpassed, or even equaled. The State Normal School was established and organized; the several districts were thoroughly visited, the teachers subjected to a rigid examination, county institutes held, local dissensions and controversies equitably and speedily settled, State conventions of County Superintendents held; and energy, vigor, and progress infused into the entire system. Col. Young was succeeded in 1845, by N. S. Benton, Esq., of Herkimer, who continued Mr. Randall in the position he had so long held, the duties of which he continued to perform until the autumn of 1846, when he was compelled by failing health, induced by his severe and unremitting labors, to resign the position and spend a few years in a southern clime for the recovery of his exhausted physical energies. The following extract from Hammond's "*Political History of New York*," will serve to show the high appreciation of Mr. Randall's services

and character, recorded by this eminent statesman and enlightened friend of education:—

"In framing this bill," referring to the amended Common School Act of 1842. "Mr. SPENCER was powerfully aided by his Deputy Superintendent, S. S. RANDALL, Esq., one of the most worthy and excellent of men, who was himself competent to preside over any educational bureau in the United States. A deep debt of gratitude is due from the people of this State to this talented and zealous friend of popular education for his services in that great and good cause. He was by profession and in principle, a Whig, and was brought into the department while the government was administered by the Whigs; but Col. YOUNG, notwithstanding, when he became Secretary of State, retained him in office. Mr. YOUNG, it is true, was an ardent politician; but this noble act proves that with him, the cause of popular education was paramount to all others. It is deeply to be regretted that the state of Mr. Randall's health has compelled him to abandon the office and migrate from the State."

During his sojourn at the South, Mr. Randall visited the principal towns and cities, lecturing on the subject of education at Washington, Richmond, Leesburg, and other places. In 1849, he was recalled to the position he had formerly occupied in the school department, by the Hon. Christopher Morgan, who had succeeded Mr. Benton, and resumed the entire charge of the system, which he continued to administer until the end of Mr. Morgan's term.* In the struggle which chiefly characterized this period, for the establishment of the Free School system, Mr. Randall took an active and decided part; and it was to a very great extent owing to his personal and indefatigable exertions that this great measure was finally carried through all the forms of legislation, and became the settled policy of the state. At the termination of this contest, and of Mr. Morgan's administration, Mr. Randall again resigned his position, and took up his residence at Washington, where he was tendered an appointment in the War Department, which he held until November, 1853, when he accepted the appointment of City Superintendent of the Public Schools of Brooklyn. This position, however, he held only for a few weeks, when he was again, and for the third time, recalled to the State department by Superintendent Leavenworth, in January, 1854. Soon afterwards the legislature passed an act, on the special recommendation of Mr. Leavenworth,

*The legislature having passed an Act authorizing a revision and consolidation of all the school laws into one act, Gov. Hunt appointed Mr. Randall as a Commissioner for this purpose, who accordingly at the ensusing session discharged the duty thus devolved upon him.

and his predecessor in office, Hon. (H. S. Randall,) separating the supervision of common schools from the office of Secretary of State and organizing it as an independent department. Mr. Randall became a candidate for the head of this department, but was defeated by the Hon. Victor M. Rice, the present incumbent; and after remaining for a few months, and assisting Mr. Rice, as his deputy, in the organization of the new department, he was appointed in the summer of 1854, City Superintendent of Public Schools in the city of New York, to which position he has been four times unanimously re-elected, and which he still (1863) continues to hold.

Mr. Randall commenced his career in the common school department at about the same period that Horace Mann, entered upon the discharge of his duties as Secretary of the Board of Education in Massachusetts, and Henry Barnard, as State Superintendent of Connecticut, and afterwards of Rhode Island. Massachusetts, Connecticut, and New York, gave the first great impulse to those efforts in behalf of popular education, which have subsequently extended over almost the entire area of the free states of our Union. In conjunction with these fellow-laborers, with the late lamented Col. Young, John C. Spencer, David P. Page, and Francis Dwight, and such men as Bishop Potter, of Pennsylvania, Henry S. Randall, of Courtland, William F. Phelps, of New Jersey, and Messrs. Bulkley and Valentine, of Brooklyn, and other names identified with the cause of public instruction, he has spent the best years of his life in endeavoring to advance the intellectual and moral interests of the rising generation, and to diffuse the blessings of education broadcast over the land.

From the accession of Mr. Spencer to the Superintendency of the School Department; through all the subsequent administrations of Col. Young, Mr. Benton, Mr. Morgan, and Mr. Leavenworth, Mr. Randall actually conducted all the business pertaining to that department; and with very rare exceptions, all the correspondence of the department, the preparation of the annual reports to the legislature, the decision of cases on appeal, the apportionment and payment of the public money, and the records of the office passed exclusively through his hands. It was not until after the department was separated from the office of Secretary of State, that any provision existed even for clerk-hire, and the labor now performed by the Superintendent of Public Instruction, the Deputy Superintendent, and some half-dozen clerks, was then thrown upon him alone. In 1845, he compiled a digest of the Common School system and laws, with a history of its origin and progress, which passed through

two editions, and became the standard authority in all cases of controversy until the adoption of the Code of 1855, by which it was superseded. Through the columns of the "*District School Journal*," and by public lectures and addresses, he exerted a powerful influence in preparing the public mind for the adoption of the principle of Free Schools; and the organization of Normal Schools and Institutes for the preparation of teachers. His various annual reports since his appointment as City Superintendent of New York, will be found to embrace recommendations, suggestions, and arguments for most of these great features in the system of public instruction in that city, which have placed it on a footing of equality with, if not of superiority, over any system of public education in the United States. He has steadily resisted every effort to render its teachings sectarian or political, while assiduously inculcating christian morality and true patriotism. He has strenuously advocated additional facilities for the higher education of females; and normal instruction for the more perfect preparation of teachers. He has uniformly sought to discountenance the infliction of corporeal or other degrading chastisements as a means of school discipline, and urged the importance and necessity of a thorough and systematic physical intellectual and moral development and culture of the pupils of our public schools—the education of the whole being. In conducting the examinations of the several schools and classes under his supervision he has uniformly sought to awaken the mental energies of the pupils themselves, and to draw out from, rather than to communicate to them, the knowledge which they had been endeavoring to acquire; to accustom them to think and to reason for themselves, instead of depending, as is far too generally the case, upon the authority of others. In short, he has endeavored to the best of his ability, to incorporate with, and infuse into the system over which he presides, the ideas and principles of the best and most enlightened educators of the age.

II. EDUCATION OF THE FEMALE SEX.

Who can find a virtuous woman? for her price is far above rubies.

The heart of her husband doth safely trust in her, so that he shall have no need of spoil.

She will do him good and not evil all the days of her life.

She seeketh wool and flax, and worketh willingly with her hands.

She is like the merchants' ships; she bringeth her food from afar.

She riseth also while it is yet night, and giveth meat to her household, and a portion to her maidens.

She considereth a field and buyeth it; with the fruit of her hands she planteth a vineyard.

She layeth her hands to the spindle, and her hands hold the distaff.

She stretcheth out her hands to the poor; yea, she reacheth forth her hands to the needy.

She is not afraid of the snow for her household; for all her household are clothed with double garments.

She maketh herself coverings of tapestry; her clothing *is* silk and purple.

Her husband is known in the gates, when he sitteth among the elders of the land.

Strength and honor *are* her clothing; and she shall rejoice in time to come.

She openeth her mouth with wisdom; and in her tongue *is* the law of kindness.

She looketh well to the ways of her household, and eateth not the bread of idleness.

Her children arise up and call her blessed; her husband *also*, and he praiseth her.

Favor *is* deceitful, and beauty *is* vain: *but* a woman *that* feareth the Lord, she shall be praised.

Give her of the fruit of her hands; and let her own works praise her in the gates.

A gracious woman retaineth honor.

A virtuous woman *is* a crown to her husband; but she that maketh ashamed *is* as rottenness in his bones.

A prudent wife *is* from the Lord. BIBLE, *Proverbs*.

Wives, submit yourselves unto your husbands, as unto the Lord.

For the husband is the head of the wife, even as Christ is the head of the church.

Therefore as the church is subject unto Christ, so *let* the wives *be* to their own husbands in everything.

Let your women keep silence in the churches.

That they may teach the young women to be sober, to love their husbands, to love their children, *to be* discreet, chaste, keepers at home, good, obedient to their own husbands, that the word of God may not be blasphemed. BIBLE; *Eph.*, v; 22–24. 1 *Cor.*, xiv; 34. *Titus*, ii; 4, 5.

The authority and dominion remain with the husband, for the wife, according to God's commandment, must be subject and obedient. The husband must govern the house and exercise authority, go to war, defend his property, plow, sow, build, plant, &c.

The wife, on the other hand, must sit at home and be busy in the house. Thus Venus was represented standing on a snail-shell, showing

that as the snail carries his house with him, so should the wife always be at home and be busied about the occupations of the house.

Among the first virtues of a wife is, that the heart of her husband shall trust in her; that is that he shall love her truly and wholly, shall anticipate no evil from her, but shall feel certain that she loves him in return, and that she will be careful of his comfort.

A pious wife should be honored and loved; first, because she is God's gift and bestowal; and secondly, because God has given to women great and excellent virtues, which far outweigh some small defects and faults, especially when they hold fast to modesty, truth and faith.

Women, when they learn the gospel, are much stronger and more fervent in faith. Mary Magdalene was more bold than Peter.

"It is not good for man to be alone. I will make him a help meet for him." These are the words of God; and can not be understood without faith.

Weak woman has nothing more precious and noble than her honor.

And thus she should be so minded as not to over-estimate ornament.

Otherwise, when once absorbed in seeking it, she will never cease from the pursuit. Such is the female character.

Therefore a Christian wife should contemn it.

A woman should be adorned, as St. Peter saith (I, iii; 3, 4), with the hidden adornment of a meek and quiet spirit.

A wife is sufficiently adorned when she is adorned for her husband.

Christ will not have you adorn yourself to please others, and to have men call you a handsome strumpet.

But to this you should look; that you have a hid treasure and a rich adornment in your heart; and that you live an unspotted and honorable and modest life.

It is a good indication that there is nothing very attractive in the mind, when too much attention is paid to ornament. (*Esther*, ii; 15.)

Gold and jewels are before man, splendid; but before God, an ill savor.

Why do foolish young women try to attract young fellows?

Do you not know that a young fellow will be afraid to choose you, if he thinks you will cost him so much in maintenance and clothing?

If you would gain the love of a young fellow, take this good advice: Be modest and speak little, and adorn yourself not much, and do not look straight at him with bold eyes.

The greatest adornment of a woman or a maiden is, a modest shamefacedness; for men's hearts are more attracted by that than by all adornments of attire.

And if this ornament departs, love also departs. LUTHER.

See, in the tender child, two lovely blossoms united; youth and maiden, but thus far the bud conceals them both. But softly its bonds are dissolved, and their fresh young natures develop, and from her lovely modesty parts his fiery strength. Suffer the boy to play; give his furious impulses freedom; only when sated, his strength will return to her grace again. Forth from the bud, the blossoms are both beginning to struggle; each is lovely, yet neither is all that the heart desires. The maiden's graceful limbs are inspired with glowing feeling; but pride, like a girdle strong, represses closely their glow. Shy, like the trembling roe-deer, that flees from the forest bugle, she flees from man as a foe; even hates him—until she loves. But the youth looks, defiant and boldly, from under his shadowing eye-brows; and, hardened to strife and battle, stiffens his sinews amain. Far in the throng of spears, along the dust-covered race-course, enticing glory calls him, and boiling courage drives.

SCHILLER.

Let your daily occupations, dear girls, like those of your brothers, be industriously pursued, and apply yourselves diligently to what is commanded you; thus you will escape many useless thoughts and many follies.

Read diligently the Psalter, Jesus the son of Sirach, and Paul Gerhard's Hymns.

Read not foolish books, but flee from them as a poison which may destroy your soul.

For a young girl's hand these two things are proper, a prayer-book and a spindle.

Be much more cautious of doubtful or false friends, than even of open enemies.

A young woman should apply herself earnestly to domestic affairs; for a wife who can not keep house is the ruin and destruction of her husband.

But if God permits, practice, besides writing, arithmetic and housekeeping, also music and singing.

If you have yet time, devote it to prayer.

Sacred singing especially, is a truly angelic and heavenly employment, and a foretaste of the beautiful and lovely music of the angels of God; especially where not overloaded with ornament, and where it proceeds from heartfelt devotion, and not from pride and conceit.

Always show modesty, and act in an unobtrusive manner.

Where there is no discipline, there is no honor; but vile passions, bad thoughts and bad deeds.

A young woman ought not to use many words; for she ought not to be crammed with mere knowledge.

May God preserve us from an over-wise learned woman!

Prayer, writing, arithmetic, singing and housekeeping, are knowledge enough for a young woman.

Also a young woman should neither curse nor swear, should never speak unless spoken to, and should always answer as briefly as possible.

Also, she should live a quiet, orderly and blameless life, not running into every corner after news and new fashions, as Ringwald says,

"Avoid her who takes pleasure in gadding, in standing at the window or the door, talks with everybody, and works or spins lazily; who is addicted to roguish tricks, is proud and irritable, and determined always to be above everybody; who is obstinate, and will not be controlled."

It is almost a born trait of women, to be able to search out, discuss and find fault with almost everything. A hateful vice! How many maidens have come to great misfortune, and been prevented from all prosperity, by their own mouths!

Therefore a young woman should guard herself from pride and vanity.

For pride is not merely a foolish vice because it costs much, but is above others to be condemned, because it turns us aside from God; and every right-minded man should therefore diligently avoid it.

A proud person is an enemy of God, who is all mildness, benevolence and goodness;—is a jest and an abhorrence to all his neighbors, and his own destruction.

Young women should strive after humility, orderliness and purity.

Modesty distinguishes a pure mother of a family; humility, an intelligent one; order and neatness, a reliable one. MOSCHEROSCH.

First, let there be nothing froward in your voice; and let your soft glance, full of goodness, not go idly forth from under your modest brow; and be neither too loud, nor too slow, in speech; for such persons are not welcome here. *Danaus to his daughters, in* ÆSCHYLUS.

The husband, in hard-working life, must work and labor, and plant and

contrive, and plot and scheme, and strive and venture, to secure success. Thus will he obtain ceaseless riches, and his warehouses will be filled with precious goods; his lands will increase, and his house will increase. And in it is presiding the modest housewife, the mother of his children, wisely ruling his domestic circle, teaching her girls and restraining her boys, and incessantly directing their industrious hands, and with judicious, orderly management increasing her husband's gains, and filling the fragrant chests with treasures, and spinning the humming thread on the spindle, and laying up in the polished box the tright wool and snowy linen, and keeping all his household goods bright and shining, and never resting.

SCHILLER. (*Poem.*)

Woman both needs, and may easily fail of securing the proper development of her immortal part, for the thankless labors and detailed occupations of her sex render her especially liable to neglect in this particular, and to be bound down and chained to earth, by the restricted limits of her sphere of action.

It is therefore time that not only amongst the lower classes, but among the middle and higher ranks, woman should raise herself out of the intellectual poverty, ignorance and restraint, the empty struggles after externals and the worthless tinsel of a shallow universal knowledge of social affairs, to which the egoism of men has hitherto usually condemned her.

To desire to place woman in a condition exactly similar to man's, is ridiculous; and to undertake this by means of the vain parade of school knowledge, is nonsense.

But she should stand as high as man, in her own department. So much is her right. And it is upon the attainment of this object that her hopes depend for a better mental development in the future. SOLDAN.

For girls, no cold speculative instruction, but a training of the susceptibilities; and one as nearly as possible adapted to the relations of the female sex.

Women can very well spare any other instruction. KANT.

All male characters show more independent activity; all female ones, more passive susceptibility.

But their difference is rather in tendency, than in natural endowment; and thus it is the difference of intellectual tendency which chiefly distinguishes the male from the female character.

The former begins by performing some action, and afterwards receives a reactive impression, through the receptive faculties. The latter pursues the opposite method, first receiving the impression, and then reproducing it by means of the active faculties. W. VON HUMBOLDT.

Man endeavors after freedom; woman after propriety. GOETHE.

The morality of women is a propriety, not a principle.

Boys may be improved by the bad example of a drunken Helot; but women only by a good example.

None but boys can pass through the Augean stable of this world's life with only a little of its odor upon them.

But girls are tender, white Paris-apple-blossoms, hothouse flowers; from which dirt must be removed not with the hand, but with a delicate brush.

They should be trained up like the ancient priestesses, only in holy orders; and should never hear anything coarse, immoral or violent—not to mention seeing it.

Magdalena Pazzi said in her death-bed, that she did not know what an offence against chastity was. Education should at least try to proceed according to that pattern.

Maidens, like pearls and peacocks, are valued most when they are whitest.

A corrupt young man may lay aside a good book, walk up and down his room with hot tears, and cry out "I will change my life"—and hold to it.

But I have heard of but few women who have thus changed themselves.

In the world's opinion, men's faults are specks, leaving little or no scar; but women's are pock-marks, deeply traced in the memory after recovery —in the public memory at least. JEAN PAUL RICHTER.

In education, the peculiar qualities of each sex need an appropriate treatment.

The nature of girls, predominantly susceptible, dependent therefore upon immediate feeling, sensitive, introverted, adapted to a narrow sphere, troubled at small things, should not be trained to noisy cheerfulness, to predominant mental activity, to clear and comprehensive generalizing, to universal tendencies in science, to a strictly logical process of thought, to rough openness of manner, to the more vivid, general, and outward phases of activity, such as are proper for boys; unless it is desired to carry them quite out of their sphere and to destroy in the germ the charm of lovely womanhood.

And on the other hand it should not be required of the predominantly active and outwardly tending minds of boys, to be as easily affected, as diligently applied to little things, as delicate in externals, as girls, whose proper sphere of action is that of propriety;—unless the pupil is to be made a pedant, and his faculties, which are intended to be exerted outwardly, are to be crippled. BENDA.

As the natural character of the sexes is different, physically and mentally, and as their departments of destined exertion are different, so must their education, while similar in general, yet be essentially different in subordinate details.

The home of the man is to be the world; the world of woman, her home.

However fearful would be the punishment of bringing up a man for woman's sphere of duty, as heavy a curse would rest upon the endeavor to bring up a woman for the occupations of a man.

The boy is endowed with clear understanding, predominant reason and firm will, corporally fitted to strive with fate, to exert a powerful activity outwardly: the girl, with lively and tender feelings, a vivid imagination, a weaker will; she is corporally unfit to act upon the outer world, to operate on a large scale, to generalize. Thus do the two sexes differ; from this point must their respective educations proceed; towards a corresponding purpose must their discipline be directed, in order to the protection and development of the nobler germs of character, and to the improvement or extirpation of bad ones.

In plainer terms: Boys should be trained to be men, citizens, husbands, fathers; girls, to be true and tender women, wives and mothers.

Anything short of this, or beyond it, is wrong.

In the education of boys, maxims of boldness should be applied; in that of women, those of prudence. SCHLEIERMACHER.

The future sphere for man is outside, in the world; in pushing and striving amongst men; there is his school.

The future theatre of feminine greatness is the family; and that is the school for girls.

To be a loving wife, a cheerful life companion, a diligent housewife, the guardian of her children, such is woman's vocation.

To-day, as much as in gray antiquity, these are still the requisites of the wife of a farmer or of a prince; except that each should also possess the easily acquired knowledge which is needed.

. Easily acquired—for the daughters of the great have been seen living in a low estate and earning a living by the labor of their hands; and the daughters of low-born men have nobly filled royal thrones.

Woman is, in her nature and in her perfection, a noble counterpart of man.

He is formed to labor and act in the struggle of the outer world; she, to govern the quiet world of domestic life, beneath the roof of her home. He is fearless, defiant, bold in danger, that he may combat opposition, or bear it down by sheer strength; she governs by grace and mildness. He, investigating and estimating everything, skillful in all manner of handiwork and arrangement, becomes almost able to create; she, the priestess of natural duties and destinies, exhibits her most valuable qualities in controlling these.

As the outward world is contrasted with the inward, art with nature, strength with gracefulness, so is man in this world contrasted with woman.

Beyond this world the destiny of both is the same; religion is the everlasting crown of life to both.

These principles enable us to recognize the principal points of woman's vocation, and the clearly marked boundaries of the course of her education. ZSCHOKKE.

Mighty art thou, O woman, by the quiet charm of thy presence.
But what thou canst not do in quiet, by violence ne'er can be done.
Power I look for from man; and laws are made to restrain him.
But woman governs by sweetness; should govern by sweetness alone.
'Tis true that many have ruled by might of will and of action;
But the loftiest crown of all was never attained by these.
The true queen ruleth alone by woman's womanly beauty—
Ruleth wherever seen; because she is seen, she ruleth. SCHILLER.

The utterly false assumption that a girl needs to know but little, has already borne bitter fruit in the education of the female children of our people.

We consider all over-education—and of course that of the female sex—a misfortune. But it is not a less one, to have youths and maidens go forth into the world and enter upon their duties in life without such knowledge and skill as is indispensable; without having acquired such an extent and profundity of moral, intellectual and æsthetic training, as to feel themselves fully prepared for the vocation that awaits them.

Unfortunately, however, the education of girls is quite insufficient, especially in comparison with that of boys.

This ought no longer to be the case; in part for the sake of the female sex themselves, and in part for the sake of the human race collectively.

For to what other hands will the coming generation confide the bringing up and education of their children, than to those of their mothers?

But where shall these find the power, capacity and skill, required for instructing others, if they do not themselves possess it? (*Luke*, vi; 39.)

It is not entertaining too sanguine hopes, to expect that a more appropriate and thorough, comprehensive and systematical education of females, having a wiser and more practical reference to their future situation and duties, would produce improvements among our common people, which could scarcely be reached by any other means.

For as is the root, so is the tree; and as is the tree, so is the fruit.

The answer of Madame Campan to Napoleon's question, what deficiency was preventing the prosperity of the education of youth, notwithstanding all the institutions for the purpose? namely, that "There was a deficiency of mothers," is a very significant one, and suggests many reflections.

MENCKE.

The purer the gold of a vessel, the more easily is it bent. The highest grace of feminine excellence is more easily corruptible than the masculine.

Nature herself has provided a born protection and guard for these delicate souls; namely, modesty in speaking and hearing.

This protection should be observed; and should be used as an indication of nature of the proper method in education.

Mother, father, husband, children even, are the best company for young women. Their acquaintance with other young women of about the same age consists of an exchange of their weaknesses rather than their good qualities.

Some dissuasives are such as to serve at once for a persuasion and a bait.

If parents set a good example, they will not find themselves under the necessity of adding any further reinforcement to the natural power of modesty, that wing-cover of the wings of Psyche.

Instruction despoils the child, first, of his innocent unconsciousness of modesty, and afterwards of the quiet influence of it.

The children of Quakers are of mild dispositions, without any punishment; for they see their parents always as calm amongst uncongenial surroundings as snow-white stars looking forth among stormy clouds.

Girls, instead of silly ornamental occupations, should occupy themselves in the various employments of the household; whose constant change and incessant demands on the attention will prevent all dreaming and reverie. In their earlier youth they should learn cooking, and then gardening; afterwards, the administration of the household, and account-keeping.

A wife is like the minister of a small state; she is at the head of all the home departments at once. The husband has charge of foreign affairs.

Girls should learn whatever develops and trains the application of the bodily senses and the use of the eyes; such as botany, that inexhaustible, peaceful, ever fruitful science, which knits us to nature by soft flowery chains; and astronomy, not merely mathematical, but religious; which widens our world, and expands our souls along with it.

I would also advise mathematics, especially the simplest principles of pure and applied mathematics, and a corresponding portion of geometry.

Geography; not a mere register of localities, which would be of little value for the mental culture of women, and of little practical use; but with reference to what it contains of solid and real history, both of man and of the earth.

History; that variety of it which only leads from one antiquity to another, as studied by girls, can not contain too small a number of dates and names, nor can it be rich enough in great men and great actions, the knowledge of which elevates the soul above mere histories of cities and suburbs.

Music, vocal and instrumental, belongs to the female soul; it is the Orphean sound which will lead her safely past thousands of siren songs; and whose youthful echo will accompany her far within the autumn of married life.

Drawing, on the contrary, at least if cultivated beyond a sufficient knowledge of its rudiments to train the eye and the taste, deprives children and family employments of too much time; so that time spent in it is usually lost.

One foreign language is necessary as a means of intelligent companion and study with our own; but one is enough.

Inspire the heart; and then it will long not for light, but for the ethereal atmosphere of heaven. JEAN PAUL RICHTER.

A husband should be earnest and industrious, and should support his wife and children honestly and respectably. He should not be a spendthrift, nor waste in drinking what his wife saves at home. Also he should be of good conduct; neither a wolf nor a lion, so that his wife may not be fearful and afraid of him. And lastly he should be upright; so that his word may be a Yes, and Amen.

A wife should be domestic, industrious, and should economically manage all that her husband so laboriously and honorably earns; not given over to sloth, laziness, and gluttony, which would bring both husband and children together to beggary. And she must be obedient; not growling, murmuring, grumbling, snarling, complaining, &c.; and good natured too.

With one judicious pleasant word, a wife can bring over her husband, and gain his consent.

But a contrary and obstinate wife is a great burden to her husband.

And who would not rather live among the wolves, than with a bitter-tempered wife?

What is more destructive to the lovely peace which should prevail at home, than the bad temper and obstinacy of a disobedient and ill-conducted wife?

For disobedience is followed by contempt for the husband; and that by violent anger.

It is far better to obey and live in peace, than to strike and bite and quarrel.

It is and must be the prerogative of the head—the husband—to govern; and the members must do the will of the head.

Lastly, a wife should be serious; not running after follies, but finding her enjoyment in managing her household. MOSCHEROSCH.

Girls, of all ranks and of whatever circumstances, should obtain practical skill in housekeeping; for during subsequent married life, even should they be in the easiest circumstances, they should always have a general oversight of their household, and be able to judge correctly of its affairs. They must know what can fairly be required of their servants; for too much is as often demanded of them as too little.

Early practice will enable a wife to conduct even a difficult household, and at the same time to do this with such ease and despatch as to have strength and leisure for intellectual employments.

A woman of good judgment, even without previous experience, can learn to keep house, by means of a firm resolution and diligent application; but her mind will be much absorbed in the work, and she will never be free from a certain anxiety, arising from the unaccustomed nature of the employment.

A Christian and well educated wife, whose quiet, intelligent and patient activity makes little display in words, and still less in constant, restless haste and scolding impatience, whose virtues and abilities will make her house so comfortable to her husband that he desires to stay in no other place, who educates her children judiciously to a Christian piety, without suffering any of the faculties which are the gift of the Lord only to be neglected or perverted into a false and narrow pietism,—such a wife should be the ideal of female education; in such an ideal is intimately united a mastery of domestic duties, and a high grade of mental training.

VON RAUMER.

Nothing is so much neglected as the education of girls.

Have not women duties which are the basis of their whole lives? Is it not they who destroy or build up families? They exert a most powerful influence upon the good or bad morals of almost all the world.

An intelligent, industrious and deeply religious wife is the soul of a whole great household; she controls it both in its temporal and eternal welfare.

Ignorance is often a cause which occasions girls to be at a loss for employment, and to busy themselves in ways not innocent.

If women reach a certain age without being accustomed to serious employments, they can neither acquire a taste for them, nor learn to value them properly. FENELON.

Attractiveness is more valuable than beauty.

Beauty is an earthly quality, and fades in a few years; but attractiveness is a charm of the soul, and adorns even old age.

There are many beautiful forms and regular features. But what pleases the senses does not always attract the mind.

It is often the case that beautiful women are destitute of that charm whose sweetness, unfeigned regard for others, and undefinable dignity, enchants the hearts of all.

Beauty quickly gives pleasure, but does not continue always to do so. Attractiveness renders even serious defects loveable, and establishes, though slowly, an enduring dominion.

It is too commonly the case that women, in their desire to please, and to rule by pleasing, exchange their native agreeableness, even during the period of education, for external politeness, gracefulness of attitude and motion, and elegance of manners. But this is only painting a faded cheek; a counterfeiting what is not really possessed.

As beauty is the charm of the senses, so is attractiveness of the mind; a charm which beams through the corporeal envelope of the body, and ennobles it.

As the strength, mental power and tone of thought in a man, are indicated without his knowing it, in his features, his words, the tone of his voice, his step, his motions, so are the innocence, mildness, and nobility of the feminine character indicated in woman's exterior, without any artifice or design.

It is not a fashionable taste that gives attractiveness; but attractiveness, which often shows itself in trifling matters, which gives the laws of good taste.

The nobler the internal character, the nobler will the external be.

Therefore a higher degree of attractiveness accompanies outward purity and simplicity, than the richest adornment; for the former exemplify the virtues of the possessor, the latter her vanity. ZSCHOKKE.

While a man who devotes himself to any elevated calling, should always have well studied the fates of the most important nations of the world, it would be inappropriate to require the same of women.

History, as studied by girls, should be directed to the cultivation of their sensibilities, their feelings, their sense of the great and noble; not the mere cramming of the memory.

The extent of what is to be committed to memory should be as limited as possible.

A chronological error is much less injurious to a young girl, than the least appearance to a pretension to historical learning.

It is self-evident that it will be of great service to a young girl, to be made acquainted with the lives and characters of the best feminine models.

VON RAUMER.

The instruction of girls in history deserves special consideration, it has been too much neglected. There should be more adaptation to their peculiar wants; and actual and ideal representations should be afforded, of the condition of women in different ages. RUEHS.

"The best fruit of history," says Goethe, "is the enthusiasm which it creates." Accordingly, the historical studies of young women should be of an elevating character; and the actual facts communicated should be explained by their respective ideals.

In a history for girls, the chief object should be, to give a biographical and ethnographical representation of the human mind, in single characters, scenes and parties; but not by means of those interminable genealogies of rulers whose names and existences are often much more uncertain than many of the facts in mythology.

Wars, campaigns and battles, can least of all have any interest for them; it will be sufficient to acquaint them by a few representations, with the results of human efforts.

More time should therefore be occupied in following the progress of civilization, manners, customs, arts and religion; and most of all, in the consideration of eminent female characters.

Great wickedness, and outbreaks of brutal vileness can not be entirely passed over; but it will not be a blamable caution, in treating of such things, to make use of much regard to the feelings of the young, and especially to the tender sensibilities of the female sex.

In a history for girls, the chief object should be to bring out the relation between the narrative and actual life; especially with that of women.

Our young women should study history, in order to learn to recognize the earnest purposes of life, and the hand of God as seen in the fates of individual men and whole nations; to avoid becoming similar to those creatures who are carried away with the frivolous sillinesses which French manners and governesses have imparted into our father-land; that in studying Greek history they may follow back to its natural condition that society which a period of affectedness has modelled into stiff and unnatural fashions; to acquaint themselves with the sensible and plain-spoken Socrates; to learn how to understand Jesus and his divine instructions; to secure themselves from falling under the dominion of either sneerers or mystics, and of thus becoming either skeptical or superstitious.

Our daughters should study history, that they may be domestic, true and honorable, after the model of the ancient German wives; that they may appreciate the important duty confided to them by Providence, of training men, from infancy upwards.

For whenever we see a great man, we may see behind him a noble mother, who carefully and lovingly watched over the seeds of his future greatness.

Our women should be acquainted with history, that they may learn how in times of barbarism and degeneration, arts and sciences, virtue and faith, have found a place of safety with them and them only; and also how bad women have caused the destruction of whole nations.

History should also be a protection against silly tattling and vulgar amusements, and all the miserable superficiality and emptiness which characterizes so many women; and also against the excessive sensibility and fancifulness which have carried away many nobly endowed women from themselves and their duty, and plunged them into irreconcilable quarrels. OESER.

As soon as a mother becomes aware that her daughters are no longer contented to be playing all the time, that they have occasional seasons of

idleness and *ennui*, she must set about supplying all manner of little occupations to prevent it.

Knitting and sewing should be taught to all girls, of whatever rank, as soon as their aptitude for handiwork is developed.

As soon as they are skilled in these occupations, they are thus fitted to learn artistic and ornamental work; lessons in which may be allowed them as a reward for industry in doing the sewing of the family.

It is desirable that girls should become sufficiently acquainted with ornamental work to be able to do all that is necessary for the tasteful adornment of a room or a dress. VON RAUMER.

The very idea of a public institution for female education is at variance with the best education for women.

The sphere of action of the future man is out in the world; and there should be his school.

But the scene for the exercise of the womanly virtues is a domestic one; the family; and this should be the girl's school.

The life of a family is entirely different from that in an educational institution.

In the former is to be found God's wisely ordained association of young and old persons of both sexes; varieties of thought and feeling, and the duties and the rights of those of different ages. Girls have an opportunity of learning what are right and wrong ways in housekeeping, and in fulfilling the duties of social life; they learn to obey the old, to take charge of the young, to be companions of those of their own age, and to direct those under their authority. Therefore the home life amongst brothers and sisters and parents, small and great together, is the proper school for girls.

In public institutions there are no parents, to conciliate the confidence of the childish heart; there are only teachers, from whom the inmost heart is cautiously concealed, for fear of misunderstanding; while outward propriety is carefully watched over, and at last comes to be the principal thing. The hundred instructive little daily occurrences of domestic life are wanting; and the peculiarities of character which make the deepest impression on the heart. Instead of these there is a cold uniformity in listening and in doing, and with the best teachers and companions, none are seen but strangers. And thus, during the most critical years of the young woman's life, her character takes an impress which is in future life to be seldom necessary, but often injurious.

She returns to domestic life, with a scientific half-education, skillful in concealing her thoughts from others, accomplished in external decorum, with an increased desire and capacity for shining before the world in little things.

Well for her if she finds there again the ancient happiness, naturalness and innocence of her childhood.

Her parents' home and those of her relatives must anew become her school.

But often it is too late, and she is ruined forever for the labors, the sameness, and the little enjoyments of domestic life.

She becomes a wife, but without becoming the cheerful companion for life of her husband; the head of a family, without being able to govern her house with consistent diligence and with equal care and wisdom both in great things and in small; a mother, without taking pleasure in maternal duties.

We have many instructions for the education of girls. But pious parents will instruct them best, in their own family.

What constituted a perfect woman thousands of years ago, constitutes her still. (See Proverbs, xxxi; 11 to 31.) ZSCHOKKE.

III. GIRLS IN THE PUBLIC SCHOOLS OF BOSTON.

Prior to 1789, according to the biographer* of Caleb Bingham, no public provision appears to have been made for the instruction of girls in the city (then, the town) of Boston. The only schools to which girls were admitted in 1784 were called Writing Schools, (in which penmanship, reading and spelling were taught,) and were kept by the teachers of the public schools between the forenoon and afternoon sessions. In that year Mr. Bingham opened a private school for girls, and such was his success, that in 1789, in the "Great Reform" which was in that year made in the public schools, he was solicited and prevailed on to take charge of one of the three Reading Schools, into which girls were admitted on a footing of equality with boys,—the girls attending the Reading School in the morning and the boys the Writing School, (each school having these two independent departments, which thus acquired the name of the double-headed system, and was continued for more than a half-century,) and in the afternoon the boys attended the Reading School, and the girls the Writing School,—the masters never changing rooms, and the boys and girls changing the half-day once a month. Even under this arrangement, girls were only allowed to attend the schools six months in the year, from April to October, and during the winter months half the boys attended the Reading School while the other half attended the Writing, alternating as the boys and girls did in summer. This state of things continued till 1826.

In May, 1825, at a meeting of the School Committee, on the motion of the Rev. John Pierpont, a Special Committee was raised "to consider the expediency and practicability of establishing a public school for the instruction of girls in the higher departments of science and literature." This Committee reported on the 22d of June following in favor of establishing such a school, to be conducted on the monitorial system, and the City Council was requested to appropriate two thousand dollars for this purpose, which was done on the 25th of September, 1825. The school was instituted by the School Committe on the 13th of January, 1826, and was called the High School for Girls, and the examination of can-

* William B. Fowle. *Memoir of Caleb Bingham*—in "*Barnard's American Teachers and Educators.*" Vol. 1., p. 55.

didates for admission was commenced on the 22nd of February following, and the school was opened under the charge of Ebenezer Bailey.

The following extracts are from the Report of the Committe appointed to consider the subject in May, 1825. The Report was written by Rev. John Pierpont:

In the first place, in regard to the *general* expediency of placing women, in respect to education, upon ground, if not equal, at least bearing a near and an honorable relation, to that of men, in any community, your committee think that no doubt can, at this day, be entertained by those who consider the weight of female influence in society, in every stage of moral and intellectual advancement; and especially by those who consider the paramount and abiding influence of mothers upon every successive generation of men, during the earliest years of their life, and those years in which so much, or so little, is done, towards forming moral character, and giving the mind a direction and an impulse towards usefulness and happiness in after life. As to the *general* expediency, then, of giving women such an education as shall make them fit wives for well educated men, and enable them to exert a salutary influence upon the rising generation, as there can be no doubts, your committee will use no arguments at this board; but will confine themselves to the *particular* expediency of provision for a higher education of our daughters, at the public expense.

And your committee think favorably of making an effort to this end, for the following reasons which are particular, as well as for the many reasons which are more general in their nature.

In the first place, it would render more efficient, and, consequently, more profitable to the city, the provision which has already been made for the public education of its daughters.

As our public Grammar schools are now constituted, some of the finest scholars in the girls' department are seen in the first class, at the age of eleven or twelve years, by the side of girls fourteen or fifteen yerrs old, who have been rather tolerated in the first class, either from courtesy to their age, or from pity to their unsuccessful efforts, than entitled to a place there, on the score of their good scholarship. As the class must, on the present system of organization, move on together, the former are continually held in check, that the latter may keep in their company; and, as the masters have neither time nor the authority to go with them into higher studies, it is easy to see, what is of every day's occurrence, that the more sprightly girls find it difficult to fill up their hours profitably to themselves; and are in constant danger of falling into habits of inattention, and mental dissipation; a danger which now presses upon them for two or three of the last years that they are allowed their seats in the public schools. Now, by the school proposed, this evil, which is a very serious one, would be obviated. The same field would be opened in this school, for the girls, as has, for a few years, been so successfully opened in the English High School, for the boys in the Grammar schools. An object would be presented of honorable ambition, and of lively competition, to the misses who are now condemned to two, and sometimes three years, very inadequately and unprofitably employed; and those indolent habits of mind might be avoided, which it is so much easier to prevent than to correct.

Secondly, the school contemplated seems to your committee to be particularly expedient for this city, in respect to the impulse that would be given by it to the whole machinery of our public instruction, through the medium of the *Primary schools.*

These schools are daily gaining the confidence of the community, and, consequently, are daily furnishing a greater and greater proportion of the children to our Grammar schools. Of course, it is of continually increasing importance that these *first* schools should be taught by those who are themselves well educated. They are, and probably will be, tought exclusively by women; and it is doing no injustice to the city, or to the gentlemen who so faithfully superintend these schools, to say, that they are not always able to find women qualified as they ought to be, to take charge of these very interesting public institutions. A school like that now in contemplation, would certainly and permanently furnish teachers for the Primary schools, competent in every respect to render the city efficient service; and espec-

ially in this respect, that they will have gained, by their own experience, a thorough knowledge of our whole system of public instruction, and the relations of its several parts to each other. Thus, the city will insure to itself a greater excellence and uniformity in the primary schools, than is possible at present, and be always able to recur to its own resources, to meet its own wants;—exhibiting thus, in morals—what has been so long a desideratum in mechanics—a piece of machinery that, by its own operation, produces the power by which itself is driven.

Thirdly, your committee think a school such as is proposed particularly expedient to this city, in regard to the experiment that might be made of it, of the practicability and usefulness of *monitorial or mutual instruction;* or, at least, of so much of that system as *on experiment* would be found to accord with the genius and habits of our community. That *something* of this system might be introduced into all our public schools, to the benefit of the schools and to the pecuniary advantage of the city, your committee can hardly doubt. One experiment has been made, and made successfully. But there were considerations which prevented the carrying of that system up from the school in which it was tried, into the higher public schools. The same system, with some qualifications, has been under successful experiment in a subscription school, composed of the daughters of our most respectable families; and yonr committee are persuaded that, under the control of a master of judgment and genius, so much of that system might be profitably introduced into a female High School, as would prove to the public in this city, that the same might be carried into our *Grammar* and *Reading* schools, at least, to great advantage. At any rate, a *satisfactory experiment* might be made. Should it fail, as it hardly can, the city will lose nothing but the time and comparatively trifling expense of making it; and should it succeed, the city will secure to itself the better instruction of one-third more children than are now instructed, and at probably one-third less expense.

Your committee are not sure that it falls within the spirit of their commission to present a statement of the studies which should be pursued in the proposed institution. But, without attempting a particular statement, or a definite arrangement, of the studies,—leaving that duty to a future committee, should the city think favorably of the project,—your committee would beg leave to recommend, in general, that in the female High School should be taught reading; writing words and sentences from dictation; English grammar, embracing frequent exercises in the composition, transposition, and resolution of sentences; composition, to be taught systematically, and to be a regular exercise in all the classes; rhetoric; geography, ancient and modern, embracing the use of maps and globes; elements of geometry, so far as is necessary to the construction of maps, and to the study of natural philosophy; arithmetic, intellectual and written; book-keeping by single entry; general history; history of Greece, Rome, England, and the United States; natural philosophy, with as much of chemistry as would be useful in domestic economy; moral philosophy; natural theology; and astronomy.

Of these studies, however, your committee would recommend that some be *required* and others only *permitted*, as tokens of merit and incitements to industry; thus opening, in this school, what this is intended to open to all the Grammar schools of the city, a course of higher instruction, as an object of honorable emulation, and the most unexceptionable reward of industry.

Having spoken thus of the general character of the school, and of the considerations which, in their opinion, render the establishment of it particularly expedient, your committee would, in the second place, state briefly their views of the practicability of establishing it.

To this there can be but one objection,—that of *expense*. But your committee are persuaded that this is not an insuperable obstacle to the effecting of an object, which seems to be so important to the best interests, and to one of the most cherished objects, of the citizens of Boston,—their system of public education. * *

When liberally supported, they more than support themselves. They are a source, not of honor only, but of pecuniary profit, to the city; for, taking into view—as an enlightened policy does take into view—the whole period during which these institutions exert their influence upon the community, they more than indemnify the city for the expense of their maintenance, in that the knowledge they diffuse through the great mass of the population, throws open new and wider fields to enterprise, gives higher aims to ingenuity, and supplies more profitable objects to industry.

The following extracts are from the Report of the Committee on the

organization and standing of the school, which was accepted by the Board in October, 1825:

Your committee would propose that the candidates for admission to this school shall be *eleven*, and not more than *fifteen* years of age; allowance, in particular cases, to be made according to the discretion of the School Committee; that they shall be admitted on examination in those studies, which are pursued in the public Grammar schools of the city; and that the examination may be strict or otherwise, as the number of candidates shall hold relation to the accommodations provided for them:—

That the *course of studies* in this, as in the English High School, shall be calculated to occupy *three years*:—

That, in pursuance of the suggestion of the original report on this subject, some studies shall be *required* of all the scholars, and others *allowed* as evidences of honorable proficiency, and as motives to higher efforts; and that the following be the studies of the school, according to the order in which they shall be pursued, until otherwise ordered by the School Committee.

FIRST YEAR.

Required: No. 1. Reading—2. Spelling—3. Writing words and sentences from dictation—4. English grammar, with exercises in the same—5. Composition—6. Modern and ancient geography—7. Intellectual and written arithmetic—8. Rhetoric—9. History of the United States.

Allowed: Logic, or botany.

SECOND YEAR.

Required: Nos. 1, 2, 5, 6, 7, 8, continued—10. Book-keeping by single entry—11. Elements of geometry—12. Natural philosophy—13. General history—14. History of England—15. Paley's Natural Theology.

Allowed: Logic, botany, demonstrative geometry, algebra, Latin or French.

THIRD YEAR.

Required: Nos. 1, 5, 12, 15, continued—16. Astronomy—17. Treatise on the globes—18. Chemistry—19. History of Greece—20. History of Rome—21. Paley's Moral Philysophy—22. Paley's Evidences of Christianity.

Allowed: Logic, algebra, principles of perspective, projection of maps, botany, Latin, or French.

The High School for Girls was opened on the 27th of February, 1826, with one hundred and thirty pupils out of 286 candidates examined, one-half from private, and the other half from public schools; of these 37 were between eleven and twelve years of age, 69 between twelve and thirteen, 72 between thirteen and fourteen, 94 between fourteen and fifteen, and 14 had attained the age of fifteen. In the account of the school, prefixed to the first catalogue, published soon after its opening, the following remarks occur:

In many respects, this institution is an experiment; and it cannot be fairly tested without patient and laborious exertions. A free school for the instruction of females, founded on principles so liberal, is in itself a novelty; but such a novelty argues well for the spirit and improvement of the age, and of the community wherein it is fostered. Although the correct literary education of females is no longer regarded as a subject of comparatively little, or even of secondary importance; this is, perhaps, the first school, established by the public care and supported at the public expense, in which they may receive a systematical course of instruction in the higher departments of literature and science. Much depends, therefore, on the success of this experiment; and it is confidently hoped that the public may not be disappointed in their expectations. It will not be supposed that a school of more than a *hundred and thirty* scholars, who have been accustomed to almost every variety of instruction and discipline to be found in the public and private schools of the city, can be organized on principles with which they are wholly unacquainted, and put into complete and successful operation, at its very commencement, by a single instructor. Much time will be required to ascertain, with any considerable

degree of accuracy, the respective powers and attainments of such a number of pupils, whose studies have been widely different, not only in the books used, but also in their order of succession. If the indulgence be granted, which these circumstances seem to demand, there can be no doubt that the success of the school will fully meet all the reasonable hopes and wishes of its friends.

An account of the peculiarities in the plan of government and instruction to be adopted, will not now be expected. The arrangements of the school, in these respects, are not yet fully matured. Indeed, as the spirit of improvement is at work in the business of education, with unprecedented earnestness and success, it is hoped that many valuable alterations may be introduced, from time to time, and incorporated into the method of teaching to be pursued; for it is the part of wisdom to neglect no suggestion, really useful and valuable, under whatever name or as a component part of whatever system, it may come before the world.

The following paragraphs, from the "Regulations and Catalogue" of the school in January, 1827, contain statements of historical interest:

The attainments of several of the candidates, who were rejected, were very creditable in all the required branches, excepting mental arithmetic; in this, all were deficient, in a greater or less degree. A large proportion of them had never paid any attention to the study; and some of those who professed to be acquainted with it, merely *ciphered without a slate*, exhibiting no acquaintance with that close and perspicuous method of reasoning, which constitutes the chief beauty and excellence of the system. It is understood that very many, desirous of entering the school, were deterred from offering themselves from examination, by a conscious deficiency in this branch; it having been embraced, but a short time, in the course of instruction pursued in the Writing Schools of the city.

No scholar shall be admitted into the school, until she shall have attained the age of *fourteen years*, nor after she shall have attained the age of *sixteen*, or shall remain in the school longer than one year. An exception is made in favor of the present scholars, who, having been originally admitted for three years, are permitted to remain until the next annual exhibition.

Candidates for admission shall be examined in Reading, Writing, Modern Geography, and Colburn's First Lessons in Arithmetic, and they shall be able to parse fluently any English composition in prose or verse.

Before the end of the second year, the school had become so popular, the applicants for admission so numerous, so many parents were disappointed that children were not received, the demand for larger and better accommodations, and for increased scholars, involved such additional expenditures, that the School Committee were perplexed, and under the lead of the Mayor, Josiah Quincy, (Senior,) on the 21st of February, 1828, adopted a report and series of resolutions, by which the Girls' High School was discontinued, the branches taught in that school were introduced into the Grammar Schools, and the girls were allowed to continue through the year in the same until they were sixteen years of age, although the boys were dismissed at fourteen. The Report by which these changes were advocated was drawn up by Mayor Quincy, and was subjected, so far as the High School for Girls was concerned, to a searching "Review" by Mr. Bailey, under whom as Principal the school had attained such remarkable success. From these documents we give the following extracts as part of the history of the education of girls, not only in Boston, but in other cities—for there can be no doubt as to the influence of the example of Boston in delaying the establishment of this class of schools elsewhere.

The sub-committee, after reciting the history of the school substantially as given in the preceding pages, observe that the effect of consequences of establishing a school of such extent and splendid promise for the education of females, to be paid for from the general funds of the city had not been exactly estimated. "The anticipations of the school committee had completely failed" not in respect to the prosperity or efficiency of the school, but in as much as the school-room deemed sufficient, would not accommodate all entitled to admission under the too liberal requisitions of candidates as to age and qualifications originally established, and because the committee in the development of the experiment find it necessary to limit the minimum age to fourteen, and the preliminary studies to every thing required in the public grammer and writing schools, thus making the Girls High School occupy for girls the same place in the system of public instruction, as the Latin and English High Schools did for boys. On this state of facts the sub-committee observe:

The great argument for a High School for girls, of the extent of time and objects of education as first proposed, was, that the same had been done for the boys, and that it was reasonable that one sex should have the same advantages as the other.

It was not however, sufficiently considered, if it was at all foreseen, that the difference of the circumstances of girls and boys, at the period of life between eleven and sixteen would make a material difference, in respect to the practicability of a school on such a basis, considered as a part of a public system of education to be provided for out of the general funds of the city.

Between the ages of eleven and sixteen, girls are not like boys, for the most part abstracted from general objects, by the necessity of attending to objects having reference to some particulrr trade or profession. A school, therefore, requiring for admissiou, qualifications, of no very high character, and such as parents by a little forcing of the education of their daughters, in private schools or by domestic instruction, might generally command, and which was in fact of the nature of a college for all girls between eleven and sixteen, was of a nature very attractive, and as it was to be confined of course to the best scholars from our public schools, it partook of the character of *selection* and *exclusion*, thereby obviating the objection which prevents some parents from availing themselves of our common schools.

The effect of this state of things was evident in the number of the candidates, at the first examination; being as above stated *two hundred and eighty-six;* and also in the reasonable anticipation made of the number of candidates, which were prepared to offer had the same state of qualification coutinued in the second examination,— from three to four hundred,— and in the fact that of all the scholars, who entered the High School, it is understood that not one, during the eighteen months of its operation voluntarily quitted it; that is, who from circumstances could have enjoyed its advantages.

The difference between the practicability of such a school as applied to females, and considered as a part of a system of public education to be paid for out of the general funds of the city, and as applied to boys, cannot be more strikingly illustrated than by a comparison of that result, with the following facts.

The High School for boys has been in operation ever since 1821, and in every respect has been successful and popular, yet the greatest number of applicants for admission, which ever offered was ninety. The greatest number ever admitted was eighty-four. And although it has been so many years in successful operation, its present number is only one hundred and forty-six.

In relation to the continuance of those admitted into the High School for boys the contrast is still more striking. The number of those annually admitted into it is constantly and rapidly diminishing, every successive year, as the parents of scholars are able to find places to put them out as apprentices, or in counting houses. So

that the fact is that "the greatest number of these who have continued through their whole course is seventeen; — and they belonged to a class consisting originally of about seventy members."

Now from the facts which have occurred and from the known circumstances of females, between the ages of eleven and sixteen, there is no reason for believing that any one, once admitted to the school, would voluntarily quit it for the whole three years; unless, indeed in case of marriage.

Another fact, not to be omitted in the estimate of the effect of this High School for girls, considered as a practicable public system is, that the greater number of those admitted to that school was from private schools; that is out of one hundred and twenty-one, sixty-two were from private, and fifty-nine from the public schools. It was understood that the proportion of the num ber about to offer for the second examination, had the original principles of admission continued, would have been far greater from the private schools.

In this connection it may be proper to state, in order to indicate the degree of preparation and expense to which the establishment of such a collegiate course of studies, under the name of a High School, would necessarily lead, that the whole number of girls, in our present Grammar and High Schools between eleven and fifteen years of age, is about seven hundred, that the number of girls, between the same ages, receiving their education within the city, in private schools and families, must be unquestionably far greater. Supposing only that the number of this class be equal, then it is apparent that there will be a great total of nearly fourteen hundred girls in every year to whom the benefits of this collegiate course, at the expense of the city, would be proffered, upon the single condition of becoming fit to enter this school within that period of age. It cannot be questioned that the proffer of so unexampled a privilege would awaken the strong desire of every parent, and female of the admitted age, in the city, to become partakers of it. And this desire would be proportionably strong and active in parents, who had been in the previous habit of educating their children in private schools, because they would feel most strongly relief from the expense to which they had hitherto subjected themselves; and would percieve that having the pecuniary ability to force the education of their children in private schools, or by domestic tuition, they would most certantly be able to avail themselves of this advantage. Accordingly it was found that the excitement and stimulus were much greater among children of this class than among any other. There was reason to expect far greater numbers from private schools than from the public. The estimate above stated made by the Sub-Committee for the High Schools for girls of four hundred was probably not extravagant, and if it had fallen short the then current year, it would without question have been equalled the next. It being next to a certanty that when so desirable and uncommon a privilege was proffered, at least one third of all within the admitted age would qualify themselves to take advantage of it As for the reasons before stated, it is believed that not one girl once admitted would voluntarily quit the school, during the whole three years.— except in case of marriage,— it followed that provision must be made for, from eight to twelve hundred scholars, in the first three years; at an expense of two High School-houses with suitable preparations, which would cost not less than fifty thousand dollars; and upon the supposition of the same ratio of masters and ushers to scholars (one to one hundred) and only the same rate of salaries as in our present Grammar schools, causing an additional expense of ten thousand eight hundred dollars annually; with a certainty that the numbers and expense must annually increase. These facts and considerations were irresistible and conclusive to show that a High Shool education was a very different thing in its results, as it respects our general school system, when applied to girls, than when applied to boys; and; that aside from all considerations of its particular effects upon our Grammar and Writing schools, some of which were unquestionably injurious, and without taking notice of the objection that it might not be within the general policy of the laws of the Commonwealth relative to public education, it could not be maintained and ought not to be continued as a part of our public system, on the basis of time and qualification, on which it was first projected. The opinion became general, if not universal, that some change in its principles must be adopted, if it were continued. Two schemes only were suggested by those, who would continue the course of three years. 1. That the High School should be confined to those educated in the commou schools. This of course would not be sustained for one moment. For in addition to the common right, which would be in-

herent in all parents, the tendency would be to bring back to our common schools a class of children, from the education of whom they were now relieved by the predilections, or pecuniary ability, of parents.

2. That the qualification should be raised while the course of three years should be continued. This last was the favorite remedy with those most desirous for the continuance of the institution on this principle of time,

A single objection seems, however, conclusive on this point. In proportion to the qualifications for admission are raised, the school becomes exclusive. Though nominally open to all, it will be in fact open only to the few, and shut to the many. Now if the objects to be acquired in a school of this kind are important to the whole community, nothing can be more obvious than that the advantages of a school, provided for out of the funds of the whole community, should be received by the whole community

If it be asked does not the same objection apply to the Latin School and the High School for boys, the answer is obvious. The destination of boys, in future life, has reference to professions and pursuits, (including services to the community in public stations,) infinitely various compared with the destination of girls. The essential reasons for supporting, at the public sxpense, these last mentioned Schools, is that they enable every individual in the community, however poor, to have his son educated for the particular profession, or pursuit in life, for which his talent destines him.

If however, these schools, instead of educating each about one hundred and fifty boys annually, should show themselves to be of a nature to attract within their sphere all those, at present educated at private schools,— if it should appear that the number must rise, in the course of three or four years, to at least eight or twelve hundred annually,— or if, of all that entered, none during the whole course would be likely to quit,— and the effect upon the common schools was positively injurious,— it would become a serious question, whether schools of that character could be supported out of the general funds of the city; and would lead either to their modification or abandonment.

Under these general views, your Sub-Committee cannot hesitate to come to the same conclusion, which the School Committee, by adopting the vote of the 17th November, 1826, effectually did, and declare it as their opinion, that the High School for girls ought not to be reestablished upon the basis of embracing the extent of time and the multiplied objects of education, which the original plan of that School contemplated.

With respect to the second question, shall the High School for girls be continued on the restricted basis, as to time and objects, to which it was reduced by the vote of the 17th November, 1826, your Sub-Committee apprehend that it will receive a decission equally easy and satisfactory. A basis, adopted for the purpose of escaping from an unanticipated exigency, containing no proportion between time allotted, and objects of education proposed, can be justified by no sound principle of wisdom. The effect of such a system, would be to make a new High School every year to be organized, disciplined and instructed, so far as respects the children, by a new master. It is scarcely possible that such a school would produce any important effects, or would justify the expenditure it would require. To say nothing of its being necessarily of an exclusive character, and its benefits confined, in effect, to a very few.

It is obviously far preferable to arrange all our Grammar and Writing Schools so as that the standard of education in them may be elevated and enlarged; thereby making them all, as it respects females, in fact High Schools, in which each child may advance according to its attainments to the same branches recently taught in that school.

Your Sub-Committee have therefore come to the conclusion, that the circumstances, in which the city is placed, by the result of "the experiment" of the High School for girls, render it their duty to enter upon the consideration of extending the advantages, now enjoyed in our public schools, upon a general and systematic plan, having reference to the exigencies of the whole community, predicated upon no principals of favoritism or exclusion, but adapted to elevate the condition, both moral and intellectual of the children of the whole community; particularly of those classes who, from their pecuniary condition are at least able to provide for the education of their own children.

The Sub-Committee, after a survey of the condition of the public schools propose the following modifications:

1. The introduction of the Monitorial system into all our public Grammar and Writing schools, as soon as it is practicable.

2. The elevating and enlarging the standard of public education, in all our Grammar and Writing Schools, so as to embrace the branches, taught, recently in our High School for girls.

To this object two things are plainly essential. 1. The introduction, as is proposed, of the monitorial system into the Grammar and Writing schools, because the High School for girls was instituted, conducted, and its studies arranged with reference to that system. 2. Removing the present fourth class from our Grammar and Writing Schools: for unless this be done, it is imposible to introduce the elevated and enlarged course of studies proposed. 3. Introducing the monitorial system also into our Primary Schools, and thus effecting the requisite modification of those Schools.

The advantages, then, which the Sub-Committee contemplate by the modifications they suggest, are the following:

1. The grammar and writing Masters will be relieved from a class of children, which distract their attention from the higher branches of education which it is the intention to multiply and extend in those schools.

2. The grammar and writing schools will be elevated both in character and standard.

3. The number of our public schools will be reduced, the modes of education in them simplified, and a greater uniformity of system and productive power will be the necessary consequence.

4. By having male instructers for male children exclusively, it will be easy without deranging the general system of our schools to introduce, and instruct, those boys, who have passed the present legal age of admission into the primary schools, without being qualified to enter the grammar and writing schools.

5. Besides the last mentioned advantages, which would result to females, under like circumstances, of age and want of qualification, another would be the consequence of having girls taught exclusively in the primary schools by females, as it would enable needlework to be introduced among the branches taught; as is the case in these schools elsewhere.

6. The opening, which would be made for the present ushers, in the male primary schools, will, by taking away one of the objections to the introduction of this system, tend greatly to facilitate the measure.

7. But the prominent and most certain effect of the system proposed is by removing the fourth class, to give room for teaching those branches recently taught in the High School for girls; whereby greater advantages it is believed will be obtained, and those more general and immediate, and more commodiously than that single school could have afforded. A high and interesting course of education will be thus kept constantly before the eyes and within the reach of all the scholars of all the schools. To advance in which course would be an object of continual ambition, to which the child would be daily stimulated by witnessing the success of others. Its entrance on that course would not depend upon acquisitions at a particular age, and which, if that age be passed without attaining, would be wholly forfeited, but would be perceptibly, within the child's reach, in every period of its school age. Indeed the effect of teaching higher branches in these schools must inevitably disseminate a knowledge of them in a greater or less degree among all the classes, even the lower, and such as would, perhaps, never have gained any knowledge, or idea of them, if they were taught, exclusively in a separate school. Such a system of teaching the higher branches, in these schools, would conform strictly to the general policy of the laws of the Commonwealth relative to public education. To it, there could be no objection, on accounts of its wants of such conformity; nor on account of its being exclusive and partaking of a character of favoritism. The children of the whole community would, if their parents pleased, enjoy of necessity and not by possibility, all the benefits of all the branches of education even the highest.

That girls may reap the benefits of the system, your Sub-Committee propose that they should be permitted to continue through the whole year, and that another year should be added to those they are now allowed to remain in the schools.

Of such portion of the Report of the Sub-Committee as treats of the High School for Girls, Mr. Bailey, who had resigned his position as Master of that School, and opened a High School for Girls on his own responsibility, published a "Review,"* from which the following extracts are taken:

The Report of Mr. Quincy recommending various IMPROVEMENTS in our system consists of three parts,—as it relates to the High School for Girls, the Grammar and Writing Schools, and the Primary Schools,—each of which would afford matter for copious remarks, perhaps for severe animadversion. It is no part of my plan, however, to examine his project, so far as it relates to what he calls, by way of emphasis, "the Common Schools." But having been appointed by the School Committee to conduct the experiment of the High School for Girls,—having devoted my time and strength and all my energies to this service for nearly two years,—and having been intimately acquainted with the whole history and progress of the institution, I feel myself called upon to expose the fallacy of Mr. Quincy's arguments, by which he would satisfy the public that "the result of the experiment has been an entire FAILURE:"—that such an institution is from its very nature "impracticable" in this city! This renders it a solemn duty to disabuse the public by showing them the other side of the picture, and, moreover, many of those friends whose opinions I am most accustomed to respect, have urged this duty upon me. For myself, I need not say, that I *can* be influenced by *no* interested motive,—my present position being far more eligible than any which the School Committee have it in their power to bestow. If, therefore, I have any personal interest in the matter, it is that the High School for Girls should be discontinued.

The subject requires that I "use great plainness of speech;" but I would not willingly forget the respect due to one who "has done the State some service,"—more especially as I have no personal animosity towards Mr. Quincy. In this discussion, he is regarded only as a public man, intrusted with important interests by his fellow citizens, and exerting an active and powerful influence upon the institutions of the city. The extent to which instruction should be carried at the public expense, is a question fairly open for discussion on general principles; and one on which intelligent and patriotic men may very honestly entertain different opinions. Whether, in particular, it was expedient to institute the High School for Girls,—and whether, after it was instituted, it ought to have been sustained,—are questions worthy of a free investigation, but they ought to be met in a manly, open and ingenuous manner. It may not be expedient to support a High School for Girls,—but it *is* expedient that the citizens be correctly informed on the subject,—and it is *not* right that the institution should be put down by "indirection." I do not complain of Mr. Quincy that he has been adverse to that school, from the very day when it was first proposed,—he had an unquestionable right to be opposed to the "experiment;"—but I do complain of him because he has not been an open and generous enemy to it,—because he has not pursued a course worthy of the institution, of himself, of the city over which he presides.

The people of Boston have been accustomed almost to venerate their public schools, for they have regarded them as a rich inheritance bequeathed to them by their ancestors. They have *loved* these institutions, for the influence they have exerted on the minds and manners and hearts of their children; and although they have never supposed their schools to be perfect, still they have been *proud* of them. They have paid liberally and with a willing hand for their support, and have felt them to be noble monuments of an enlightened policy. Nor has this feeling been confined to citizens of Boston alone. Their system of free schools has excited the admiration of intelligent strangers, not only from different parts of our own country but from Europe, and has been regarded as a model, well worthy of being attentively studied. It is not generally known except to their teachers, how often the public schools of this city are visited by persons from abroad, interested in the subject of education. While the High School for Girls was in operation, it was thus visited almost daily. It happened not unfrequently, that many gentlemen were present at

*"Review of the Mayor's Report, on the Subject of Schools, so far as relates to the High School for Girls." By E. Bailey, late Master of that School, 1828, p. 54.

the same time, who had come from different and from distant parts of the country for the single purpose of examining the methods of education pursued in this city. Among these were often to be seen the accredited agents of public institutions from different cities.

Knowing these things, it was with a feeling of mortification,—of astonishment,—that I read the Report of Mr. Quincy. I was not prepared to hear, from the Chairman of the School Committee, that our whole system of public education is radically wrong,—that we are vastly behind the age in this respect,—and that our schools are so essentially defective, that their present arrangements must be torn up, root and branch, to make way for a new organization. No one will deny that these schools have some defects which demand a remedy. But these are merely accidental faults, which can be removed without destroying the integrity of the whole system,—a system which has been advancing towards perfection, under the fostering care and wisdom of successive generations; and which, if it has not produced many FRANKLINS, has at least rendered the population of Boston proverbial for their love of order, and their general intelligence.

It is true the free schools of Boston are very liberally supported, and the people wish them to be so. *They* do not complain of the expense, for they want a *good* education for their children, not a cheap one. No doubt, they wish their rulers, by a prudent and economical course of policy, to husband well the resources of the city, and not squander them on extravagant schemes and doubtful speculations. I speak now of the great body of the people, upon whom the public burdens fall with the greatest weight; for I am not ignorant there are some individuals who think too much money is expended for the schools. I have heard such an opinion avowed by more than one member of the City Government,—*and by no one else.* In that quarter it has been said, that the public schools should be merely eleemosynary establishments, where nothing but the lowest elements of learning should be doled out to the children of poverty! The municipal officer who avows such a sentiment in this community, must be respected, at least, for his fairness and candor. From such a man, the friends of a liberal system of education have nothing to fear, for they always know where to find him. But it is from those who hold the same opinion, but have not the courage to avow it,—from those who would reduce the schools from their present rank by "indirection,"—that real danger is to be apprehended. And that this is the design of the present project of the Mayor, however it may be disguised and glossed over, is but too evident. He talks much indeed about "raising the standard of our common schools;" but how does he propose to do it? Why, simply by adding a splendid list of new studies, dismissing half the present teachers, and making them like the Monitorial Schools of New York! Nothing could be easier. Did our worthy Mayor ever see those same Monitorial schools which he is holding up to our view as models? or did he suppose no person in Boston had ever seen them?

The history of Mr. Quincy's Report is understood to be as follows. After I had tendered to the School Committee my resignation as Master of the High School for Girls, a sub-committee was raised to take into consideration the expediency of continuing the school. This committee made a report early in the month of December, which recommended that the school should be sustained. Upon the question of accepting this report, the committee were equally divided; and Mr. Quincy *shrunk from the performance of his official duty, as Chairman of the School Committee, and declined giving his casting vote!* This fact is worthy of being remembered. The fate of the school was then thrown wholly into his hands,—it hung on his individual decision. By raising his finger he could have saved it, and he would not. Now that he was called upon to act openly and decidedly, he shrunk back. His cherished feelings of hostility to the school would not permit him to sustain it, and *at that particular juncture,* he might have found it inconvenient to incur the responsibility of putting it down; for it was a popular institution, and *during the month of December,* there was not a little excitement on the subject. It was finally moved to refer the report to the next School Committee. On this question, the members were again equally divided, and the Mayor *gave his casting vote for postponement.* Soon after the organization of the present Board, the subject was again referred to a sub-committee, of which Mr. Quincy was the Chairman; and the result of their labors,—or rather of *his* labors,—will be found in the report now under consideration; the real object of which is to discontinue the High School for Girls, and the

incidental to "improve and elevate" the other schools. It has somehow happened, however, that the *accidental* circumstance has given a name to the document, and that the Committee appointed to examine into the expediency of continuing the High School for Girls, have reported on another and quite a different subject! The explanation is, that while Mr. Quincy had neither forgotten this school, nor his settled determination to put it down, he could not venture upon this measure —*even after he had secured his election for another year*—without informing the public that he was about to substitute something better in its place; and hence brings into review our whole system of Public Schools.

Grant that the High School for Girls was but an "experiment," it will not be denied that it was a very important one. It was the *first* institution of the kind; and as such, not only excited a lively interest in our own community and country, but even in England, and on the Continent, the establishment of this school was honorably noticed in the public journals. It is highly important, therefore, to the general interests of female education, that the true result of this "experiment" should be known. If it were indeed a "failure,"—that is, if our own experience has made it certain that it is either inexpedient or impracticable to extend to females a liberal course of education,—it should warn others not to make the attempt. But if the "failure" proceeded from other causes, it should be exposed, that the great cause of female education may suffer no detriment.

Can an "experiment" be said to have "failed" in any correct sense of the term, when it has fully answered all the purposes for which it was instituted? That this has been the fact with respect to the High School for Girls may be shown from the following abstract of the views and motives of the School Committee in undertaking the "experiment:"

1. On principles of general expediency, it was intended to make more liberal provisions for female education in the city, by furnishing the girls a school, "similar to the High School for Boys, as an object of ambition and profitable employment for three years of life, now inadequately occupied."

As to the success of the school so far as the proficiency of the scholars should be taken into the account, it is not for me to express an opinion. This point is willingly left to the decision of the public. Even Mr. Quincy has graciously allowed that the "conduct of the school was very satisfactory both to the parents of the children and to the School Committee." And that "as an object of ambition," its influence was even greater than had been anticipated, is evident enough from the whole tenor of the Mayor's report. In these respects, therefore, the expectations of the School Committee were fully realized; there was no failure here.

2. The Committee thought "it would have a happy effect in qualifying females, to become instructors in our public schools."

That it has had "this happy effect," is manifest from the fact that several of the young ladies, educated in the High School, are now engaged in teaching; while many others, thoroughly qualified for the business, would gladly be thus employed. Here, then, there was no "failure."

3. The Committee supposed "it would put to test the usefulness of monitorial or mutual instruction, and the practicability of introducing it into our public schools."

Mr. Quincy himself says "it effectually proved the advantage of the system of monitorial or mutual instruction;" and that it proved its "practicability" may be safely inferred from the strenuous efforts he is now making to accomplish that purpose. Surely, there was no "failure" here.

To what, then, is the "failure of the experiment" to be attributed? In what did it consist? The report states several circumstances,—all connected with the necessary accommodations for the school,—in which the projects of the committee seem to have failed.

In instituting a High School for Girls, of course it was supposed that a house for its accommodation would be eventually wanted; though not absolutely necessary "the first year of its operation." For *one* year,—*one* class,—an unoccupied story in the Bowdoin school-house would be sufficient. Who, for a moment, dreamed that the incapacity of that one room to accommodate the *three* annual classes would be construed into a failure of the project? Yet such has been the case. And more, when the sub-committee of the High School for Girls made their report in August, 1826, and stated that "so far the experiment had succeeded, beyond the most sanguine expectations of those who had first proposed it;" that "the interest of the

pupils had been so much excited, the attendance so constant, and the desire of remaining in the school so great, as often to lead to a great personal sacrifice of ease and pleasure, rather than forego its benefits;" that "the school had so firmly established itself in the confidence and affections of the citizens, as to encourage them to ask for an appropriation for its continued support and permanent accommodation;"—Mr. Quincy, the Chairman of the Committee to whom this report was referred, delayed making a report till *the October following*. And although the exigencies of the school were pressing, he postponed, in that report, making any provisions for the school, until the result of the next examination of candidates for admission, should be known!, leaving the question of a room to accommodate the scholars to be settled *after* they were ready to occupy it!

In the same month, Mr. Quincy addressed a circular to the Masters of the Grammar Schools, from which the following extracts are made:

"Suggestions having been made that the effect of the High School for Girls is disadvantageous upon the character and prospects of the other schools in this metropolis:

1. By diminishing the zeal of the generality of the other females in these schools.
2. By taking away their most exemplary scholars.
3. By disqualifying the masters from a gradual introduction into these schools of the monitorial system, by thus removing from them the class of females best qualified to become monitors.
4. By reducing the other schools from the highest to a secondary grade, by early depriving them of those scholars in whom they have the greatest pride, and who are of the highest promise.

I am therefore directed to inquire whether there is any foundation for these suggestions, and what effect has been produced by the High School for Girls on the character and prospects of your school." JOSIAH QUINCY,

Chairman School Committee.

No one can mistake the object of this most remarkable circular. First, "suggestions" are made to the masters, that the effect of the High School has been "disadvantageous" to the schools under their immediate care! By whom had these suggestions been made? Who was the author of them? Why was not the same alarm sounded with respect to the Latin and English High Schools which must have produced the same effect? I must acknowledge myself ignorant on what principle of human nature "the zeal of the best scholars would be *diminished*" by the prospect of an admission to the High School as a reward for their exertions! Finally the masters are reminded—all in sheer good-nature and simplicity of purpose, no doubt—that their schools were reduced to a "secondary grade," and that their most "exemplary scholars" were taken away! For what other class of scholars was the High School instituted? If it had not taken them away, it should indeed have been regarded, and justly, as a "failure."

The inference from this artful series of leading questions is irresistible, that it was Mr. Quincy's object to draw from the masters such a strong and united expression of opinions unfavorable to the High School for Girls as should seal its fate. He would thus accomplish *his* purpose; while upon *them* would fall the odium and responsibility of the act. I am well aware that, here and elsewhere, it is my misfortune to represent the character of Mr. Quincy, as a plain, frank, high-minded magistrate, in a questionable attitude, to use no stronger language. But for this I am not answerable. The *facts* are not of my making, they are on record. If the inferences are unjust or unwarranted, the opinion of an humble individual like myself will not give them currency.

But if Mr. Quincy wrote with these views, he mistook his men. With the exception of two or three, who responded as he probably wished and expected, the testimony for the teachers was, for the most part, in *favor* of the High School for Girls. However, Mr. Quincy proceeded to draw up a report, stating the "disadvantageous effects" of that institution on the other schools, and alluding to the *melancholy* and *unexpected* fact, that another class would demand admission in a few days!—whereat the reporter seems not a little puzzled,—as he cannot readily contrive how to bestow 130 girls in 130 seats already occupied! However, he is not yet "prepared to recommend that the High School should be abandoned, considering its apparent past success, and the general satisfaction of those who have enjoyed

its benefits. He then goes on to recommend instead certain measures, which he *now* declares to have changed every one of the original features of the plan. He laments that, "instead of a High School, as originally projected for the admission of girls between eleven and fifteen years of age, none were to be admitted until they were fourteen; that instead of remaining three years, the course of instruction was limited to one year." Was the High School really instituted for the especial benefit of girls of eleven years of age, as the Mayor intimates when he speaks of the exclusion of "girls of eleven years of age, which was one of the *prominent* objects of its institution;" or has he seized upon an accidental circumstance, of little account or importance in itself, that one more item may be added to his list of "failures?" The original regulation, which required that a candidate should be of a specific age to entitle her to admission, was little better than absurd, and this vote made the matter worse. No limit of age should ever have been fixed, under which a girl might not be a candidate for admission. No restriction should have been prescribed excepting that of scholarship. To exclude a girl from admission to the schools in this city, where she would be daily subject to the care and control of her parents, simply because she is too young, is to inflict a penalty on industry and talents. I know not on what principle the rule in question can be defended, unless it be the true policy to deter children from making a rapid advancement in knowledge. Abolish this arbitrary rule,—let scholarship alone be required for admission into the higher schools,—and their influence would be more strongly felt in every part of the system.

It may be remarked that Mr. Quincy's apprehensions relative to the expense of maintaining a High Sohool are quite groundless. In another community, it might be an effectual way to bring a valuable literary institution into disrepute by magnifying its expense; not so here. Besides, the grand mistake in all the Mayor's estimates, that "two High School-houses would be necessary the first year," lies in taking it for granted that every girl who makes application is entitled to admission into the High School. Nothing is more certain than that the School Committee might confine the operations of the High School for Girls to a single house for all coming time;—by keeping the standard of qualifications sufficiently high. "But," says Mr. Quincy, "in proportion as the qualifications for admission are raised, the school becomes *exclusive*, and though nominally open to all, is in fact open to the few." This is an idea upon which he evidently dwells with great complacency. That school must indeed have a strong hold upon the public confidence, which does not become odious and unpopular, when the Chairman of the School Committee, in his official capacity, openly proclaims the "*favoritism*" and "*selection*" and "*exclusion*" of the principles upon which it is based. Ought such epithets as these to be applied to the High School, because it was not designed that *all* the girls in Boston should acquire *all* their education in it? Is there either "selection," or "exclusion," or favoritism," in furnishing to every girl in the city exactly that kind and degree of instruction which she most needs? Mr. Quincy himself, in a communication made to the School Committee in 1826, recommending that a *thorough* knowledge of all the studies taught in the Grammar and Writing Schools should be required for admission to the High School, says, "by an adherence to this system, it cannot be doubted that the High School will, in one or two years, become, *what it ought to be*, a school for the instruction in those parts of science to which the common schools are *from their constitutions inadequate, and for which they were not intended.*

Now in the face of all these facts and many others like them, some of which will be given, and all of which *shall* if necessary,—after all of these contrivances by which the "failure" of the High School was compassed, "*et quorum pars magna fui*," Mr. Quincy may well say,—he next proceeds to talk about the "perfect fairness with which the experiment was conducted!" "for the most part under the same auspices which first adopted it!" The "changes" of which he speaks, have been proposed under the particular "auspices" of Mr. Quincy himself, and have been effected by his influence, authority and management,—yes, *management;* for he has in every instance when a committee was to be raised on the subject of the High School, either assumed the office of Chairman himself or appointed as Chairman some one supposed to be hostile to the institution. If there be any exception to this remark, it has not come to my knowledge, familiar as I am with the history of the school. At any rate the assertion is confidently and fearlessly made. If in-

justice is done, it can easily be shown, and it will give me pleasure to be convinced of my error.

As an example of the "perfect fairness" with which "the experiment was conducted," I will cite the course taken by the Mayor in regard to changing the hours of attendance at the High School. At the request of one hundred and seven of the parents of my scholars, I addresed a communication to the School Committee requesting that the school might have but one session, from 8 A. M. to 2 P. M., and giving a minute account of the reasons which led such an alteration of hours to be desirable. As soon as my letter had been read at the Board, Mr. Quincy hastily forestalled the remarks of other gentlemen, by expressing his decided disapprobation of "my very extraordinary proposition," as he was pleased to call it. One other member of the Committee was equally opposed to the change, and two others were doubtful as to its expediency; it was therefore determined to refer the subject to a special committee. Was it, as both usage and decorum required, referred to the sub-committee of the school? By no means; for they were in favor of the change, being well acquainted with the reasons for it. Mr. Quincy nominated a select committee for the purpose, *consisting of those three gentlemen who were not friendly to the measure proposed!* Two of them, however, became satisfied that the change was necessary, and reported accordingly; and the vote of the committee was nearly unanimous for accepting the report.

It has also been intimated that the High School was neglected, by these members of the committee, whose duty it was to watch over its interests and concerns. During the last year, it was not honored by a single visit from the sub-committee. The Chairman, Mr. Welsh, was in the room but twice, once when he introduced some members of the Legislature, and again when he came to witness the "Farce!" as he courteously termed the late exhibition. This speech came with peculiar propriety from the Chairman of the Committtee of the High School, and was the only one delivered on the occasion! If the "experiment" were an "entire failure," why was not that fact announced at the closing scene, when the attentive and crowded assembly,—numerous beyond all precedent in this city on a similar occasion, could have borne testimony to the wisdom and correctness of the decision? Again, when Mr. Quincy wrote to the masters of all the other public schools, demanding of them how many times they had been visited by their respective sub-committees, was it merely accidental that he omitted the master of the High School? I pause for a reply.

I will give one more instance of neglect. When the High School was instituted, the text-books for the first year only were determined. The higher classes having studied and reviewed all these, became impatient to commence the next studies in order. All verbal applications having proved of no avail, a letter was addressed to Mr. Quincy, urging in strong terms the necessity of immediate attention to this subject. After pressing my request, and waiting in vain for a long time, I took upon myself the responsibility of introducing such text-books as seemed best adapted to the course of studies marked out; otherwise the girls in the High School would not have had a single book to study during the whole of the last year! The extent of this responsibility may be learned from the fact, that any teacher who violates any of the regulations of the School Committee, shall immediately be dismissed; and these regulations provide that the books used in the public schools shall be "*such and such only* as shall have met the approbation of their respective sub-committees."

While the *visits* of the committee were "few and far between," the only written communication from the board with which I was honored for more than a year, was a letter from the Mayor, reprimanding me "in good set terms," because the young ladies, of their own free will and motion, had agreed among themselves to wear black silk aprons at the exhibition! And many of the communications which I made to the board from time to time, were so far honored as to be transferred to the hands of Mr. Welsh, and nothing more was done in the matter! The teachers of large public schools meet with so many daily trials and vexations, that they may feelingly say, "sufferance is the badge of all our tribe;" but when to these is added the marked hostility or contemptuous neglect of their employers, their duties become too irksome to be endured, unless they are either more or less than men.

While our worthy Mayor was making an array of instances in which the "original intention" of the Committee, in respect to the High School for girls "had failed," he might have added one case of *real* "failure" of some importance to the

master at least. He might have said that the board "failed" to pay the salary which had been virtually promised, and which I had a right to expect. In establishing the High School, the intention of the Committee was distinctly expressed, that the master should be placed "in respect to salary upon a level with the masters of the Latin and English High Schools," who, it is well known, receive $2,000 a year And when I became a candidate for the situation, it was with this understanding. It was suggested, however, that it would be safer to *begin* with a smaller salary, since, if the school were successful, it might easily be increased, and with these expectations, I was satisfied to accept the office with a salary of $1,500.

I am unwilling to speak of my services in the High School, yet may simply refer to their *amount* not to their *value.* The masters of the Latin and English High Schools have each under their immediate care from thirty to forty scholars; and each of them has several ushers to assist in the general superintendence of the school. I had under my sole care more than one hundred and thirty scholars, and in all circumstances was obliged to depend on my individual resources. Shall I be told that I had the assistance of scholars? So may every master have. But if the school had been badly conducted, would the scholars have been held responsible? I have no faith in the system which delegates the *authority* of the master to mere children, and *substitutes* the instruction and discipline of monitors for *his* personal services.

After the school had been fairly established, when the time for fixing the annual salaries approached, I requested the Committee to place mine on the basis originally proposed. I thought the request would be granted almost of course, but after a mature deliberation of several months, my letter was returned, with a very laconic endorsement upon it, that the request would not be granted! No reason was given for this very flattering and satisfactory decision. Indeed, I have never yet heard any reason assigned why the master of the High School for girls should be paid one quarter less or *any* less salary than is paid to the principals of the Latin and English High Schools. His services *should* have been as valuable, his attainments as excellent and varied as theirs. The school undeniably *deserved* as good a master as any in the city, and if the incumbent was not competent, it was a misfortune that might have easily been remedied.

But one course now remained for me—to send in my resignation, which I accordingly did in November, 1827. But I would beg leave to ask what would have constituted a *successful* "experiment" according to Mr. Quincy's ideas upon the subject? If the school had excited but little public interest—if few parents had wished to send their daughters there—if the mode of government and instruction had been unpopular—in a word, if its members, from any cause, had been so few that a single room would have furnished the necessary accommodations for the three annual classes, he would have regarded the experiment as completely successful! Should any one think this a distorted picture of Mr. Quincy's sentiments, I beg him to read his report and judge for himself. But as the school happened to be the reverse of all this, as the public voice was loud and emphatic in its favor, as the strongest testimony possible was heard from almost every class in the community that such a school was wanted and demanded, the "experiment" is denounced as "an entire failure," and the institution is to be annihilated, "as bodies perish through *excess* of blood!"

In concluding this review, I would again repeat that I was not moved to undertake it, either by personal interest or private feeling. It will readily be conceived that this opposition to the High School for girls manifested by some of the most influential members of the School Committee on all occasions, must have been a deep source of mortification and regret to a man whose hopes were all centred in its success, and who labored, regardless of fatigue and health and the pleasures of society, to satisfy the wishes and expectations of its friends so far as his limited abilities would permit. The *fact* of Mr. Quincy's hostility to the school is manifest, and his unfavorable account of the "experiment" will be respected accordingly. The integrity of his *motives* has not been questioned. Doubtless they have been pure and conscientious; a difference in opinion is no proof of dishonesty. But while it is granted that his opposition to the school may have been founded in a sincere belief that the interests of the city do not require such an institution, it cannot be denied, that in his zeal to put it down, he has suffered himself to pursue a course of measures which we should not have expected from an intelligent and high-minded magistrate.

Boston, 1828. EBENEZER BAILEY.

Mr. Quincy, in his "*Municipal History of the Town and City of Boston, from Sept. 17th, 1630, to Sept. 17th, 1830*," published in 1852, after giving the history of the High School for Girls up to January, 1828, refers to the views expressed in his inaugural address to the City Government in that month, to the effect,* that "this school, instead of being for the benefit of the children of the whole community, was, in fact, comparatively for the benefit of a very few, and that, too, of a class who were best qualified, by intelligence, education and wealth, to provide for the high instruction of their own children," and continues:

Leading members of the City Council coincided in these general views; and at a meeting early in January, 1828, at the suggestion of the Mayor, the succeeding School Committee took into consideration the subject referred to them by the preceding Board; and when under discussion, say the records, "James Savage remarked that, though he had, as a member of the Common Council, voted an appropriation to the High School for Girls, it was mainly with a view to make a public experiment of the system of mutual instruction; that he was opposed to the High School for Girls, and to the whole system of instruction, as regards females; he therefore moved, that a sub-committee be raised to consider,—

"Whether the High School for Girls shall be continued, and the basis on which it shall be established;—

"Whether the girls may not well be allowed to remain at the Grammar Schools throughout the year;—

"And, whether the time of their continuance at these schools may not be advantageously extended."

This motion being adopted, the following Sub-Committee was appointed for its consideration, namely,—the Mayor, John Pickering, Samuel T. Armstrong, William B. Fowle, Samuel Barrett, Zabdiel B. Adams, and Amos Farnsworth.

This Committee made, on the twelfth of February, an elaborate report unanimously, in which was set forth, in detail, all the chief views and arguments connected with the subject; and declared their opinion, that the High School for Girls "ought not to be reëstablished upon the basis of embracing the extent of time and the multiplied objects of education which the original plan of that school contemplated;" and that it ought not to be continued "on the restricted basis, as to time and objects, to which it was reduced by the vote of the seventeenth of November, 1826;" but that "it was far preferable to arrange all our Grammar and Writing Schools so that the standard of education in them may be elevated and enlarged, thereby making them all, as it respects females, in fact, high schools, in which each child may advance, according to its attainments, to the same branches recently taught in the High School for Girls. The Sub-Committee then entered upon a wide survey of the whole school system; and closed their report by recommending a series of resolutions, which, after undergoing some modifications, were adopted by the School Committee unanimously, in which the opinion of the School Committee was declared, that it was for the interest of the city, that the mutual or monitorial system of instruction should be introduced into the Boylston and Bowdoin Schools; that an appropriation be requested of the City Council, for preparing the schoolhouses for this purpose; and the Sub-Committee, who made the report, were reap-

* "Every school, the admission to which is predicated upon the principles of requiring higher attainments, at a specified age or period of life, than the mass of children in the ordinary course of school instruction at that age or period can attain, is in fact a school for the benefit of the few, and not for the benefit of the many. Parents, who, having been highly educated themselves are, therefore, capable of forcing the education of their own children; parents, whose pecuniary ability enables them to educate their children at private schools, or who by domestic instruction are able to aid their advancement in the public schools, will for the most part enjoy the whole privilege. In form it may be general, but it will be in fact exclusive. The sound principle upon this subject seems to be, that the standard of public education should be raised to the greatest desirable and practicable height; but that it should be effected by raising the standard of our common schools."

pointed to carry the resolutions adopted into effect. On the third of June ensuing, "Mr. Savage moved that the girls be permitted to remain in the English Grammar Schools throughout the year." This motion being adopted, and measures taken for carrying into effect the views thus sanctioned, the project of the High School for Girls was abandoned, and the scale of instruction in the Common Schools in the city was gradually elevated and enlarged.

This result, and distinctness with which the Mayor had made known his opinion, concerning the inexpediency of establishing such a High School for Girls at the expense of the city, in opposition to the views and interests of a body of citizens of great activity, and of on inconsiderable influence, gave origin to party assaults upon the motives and conduct of that officer, which he noticed in his final address to the Board of Aldermen, on taking leave of the office, in January, 1829. The soundness of these views, and their coincidence with the permanent interests of the city, seem to be sanctioned by the fact, that twenty-three years (1851) have elapsed, and no effectual attempt, during that period, has been made for its revival, in the School Committee, or in either branch of the City Council.

The following are the passages in his address on taking leave of the office of Mayor, in January, 1829, to which Mr. Quincy refers in his History:—

But the High School for Girls has been suspended. As, on this topic, I have reason to think very gross misrepresentations and falsehoods have been circulated in every form of the tongue and the press, I shall speak plainly. It being in fact a subject on which my opinion has at no time been concealed.

This school was adopted declaredly as "an experiment." It was placed under the immediate care of its known authors. It may be truly said that its impracticability was proved before it went into operation. The pressure for admission at the first examination of candidates, the discontent of the parents of those rejected, the certainty of far greater pressure and discontent which must occur in future years, satisfied every reflecting mind that, however desirable the scheme of giving a high classical education, equal about to a college education, to all the girls of a city, whose parents would wish them to be thus educated at the expense of the city, was just as impracticable as to give such an one to all the boys of it at the city's expense. Indeed, more so, because girls, not being drawn away from the college by preparation for a profession or trade, would have nothing except their marriage to prevent their parents from availing of it. No funds of any city could endure the expense.

The next project was so to model the school as that, although professedly established for the benefit of *all*, it might be kept and maintained at the expense of the city for the benefit of the *few*. The School Committee were divided equally on the resulting questions. The subject was finally postponed by the casting vote of the Chairman. As all agreed, that new and great appropriations were necessary, if the school was to be maintained according to its original conception, the Chairman was directed to make a report on the whole subject to the City Council. The report indicated that, in such case, appropriations were indispensably necessary, but did not recommend them, because a majority of the Committee were not favorable to the project. That report was printed and circulated throughout the city. A year has elapsed, and not an individual in either branch of the City Council has brought forward the question of its revival by moving the necessary appropriation.

No shield has ever before been protruded by the individual principally assailed as a defense against the calumnies which have been circulated on this subject. It has now been alluded to, more for the sake of other honorable men, who have, for a like cause, been assailed by evil tongues and evil pens, than for his own.

In all this there is nothing uncommon or unprecedented. The public officer who from a sense of public duty, dares to cross strong interests in their way to gratification at the public expense, always has had, and ever will have, meted to him the same measure. The beaten course is, first, to slander, in order to intimidate; and if that fails, then to slander, in order to sacrifice. He who loves his office better than his duty will yield and be flattered as long as he is a tool. He who loves his duty better than his office will stand erect and take his fate.

All schools requiring high qualifications as the condition of admission, are essentially schools for the benefit, comparatively, of a very few. The higher the qualification, the greater the exclusion. Those whose fortunes permit them to avail themselves of private instruction for their children, during their early years,—men highly educated themselves, who have leisure and ability to attend to the education of their own children, and thus raise them at the prescribed age to the required qualification,—will chiefly enjoy the privilege. To the rest of the community, consisting of parents not possessing these advantages, admission to them is a lottery, in which there is a hundred blanks to a prize. The scheme to reduce the school to an attendance of one year, seems to be a needless multiplication of schools and of expense; as it is plainly far better that a year should be added to the continuance in the common schools, and their course of instruction proportionably elevated.

The great interest of society is identified with her common schools. These belong to the mass of the people. Let the people take care, lest the funds which ought to be devoted exclusively to the improvement and elevation of these common schools, thus essentially theirs, be diverted to schools of high qualification. Under whatever pretense established, their necessary tendency is to draw away, not only funds, but also interest and attention from the common schools. *The sound principle upon this subject seems to be, that the standard of public education should be raised to the greatest desirable and practicable height; but that it should be effected by raising the standard of the common schools.*

For a period of twenty-three years, as was stated by Mr. Quincy, in the above extract from his History, no effectual attempt was made in the School Committee, or in either branch of the City Council, to revive the High School for Girls. But in the report of the committee to make the annual examination in May, 1847, (drawn up by Joseph M. Wightman,) it is suggested that "precisely the same studies are taught to both boys and girls, without regard to the difference in their constitution and physical strength, or the adaptation of the studies to their peculiar positions in life;" and then lays down the principle that "a school for boys should comprehend the studies which will be most useful to them as men." Among the deviations in practice from this principle, the report complains that the studies of the girls in the public school are "too extensive and too difficult." "Many portions of arithmetic and the whole of algebra, are as unnecessary to female education in our Grammar Schools, as would be the science of engineering, or a course of law studies." If a higher class of studies is required for a portion of the girls, to qualify them for teachers, or other peculiar duties, the committee are of opinion that a High School, similar in rank to that for boys, but adapted to female education, should be established, to which might be transferred some of the studies now pursued in the Grammar Schools." The report suggests as an aid to check the growing evils "of extravagant family expenses, and entire disregard of the dictates of prudence," that girls "must be taught habits of industry and economy, as wanted to the faithful performance of the higher duties of life. As one of the means to accomplish this, let plain sewing be taught and practiced in all of the classes in the school—let prizes be awarded for it—let an important and high rank

be given to it in our estimation, and in a short time, the ambition of the pupils will be, to excel in this most legitimate of female avocations. Its practice will relieve the tediousness of mental exercise in school, and its effects will be to render home the abode of comfort and happiness, from the industry, order and neatness which will pervade it."

On the 2nd of February, 1848, S. H. Jenks, G. B. Emerson and R. Soule, Jr., were appointed a Special Committee "to consider the expediency of establishing a High School for Girls, with details and estimates in relation thereto." This committee reported, on the 3d of May, in favor of establishing two such schools, and of providing for the accommodation of the same—one in the large upper hall of the Quincy Grammar School, and the other in a similar hall of the Hancock School—each school to receive 250 pupils, and the annual expense for both not to exceed $5,000. The committee maintain that the law of the state requiring every town containing five hundred families to maintain, in addition to its ordinary district schools, a town school of a higher grade "for the benefit of all the inhabitants," was not complied with in Boston, inasmuch as the Latin and English High Schools were not open for girls, and that this exclusion, without other public opportunities for similar instruction, was unequal and impolitic. Without such opportunities women could not become the teachers of the coming generation, and "the fit civilizers of mankind." They can see no reason why the faculties of females should be deprived of the intellectual food provided for those of males; and on the other hand, they assert that the cultivation of these faculties will elevate the female character, and through that elevation society will unspeakably be benefited. On the 24th of May, the same committee reported in favor of appropriating $2,491 for seating and equipping generally the halls above specified for two schools, and $6,500 for two principal preceptors of the same qualification prescribed for the Latin and English High Schools, and six female assistants. The course of study recommended, besides a review of the branches pursued in the Grammar Schools, embraced "algebra, natural history, natural and intellectual philosophy, astronomy, botany, chemistry, moral science, and the Latin, Greek, and French languages." The preceptor of each school was required "to give such pupils as may desire to enter a class for the purpose, suitable lectures on the art of imparting instruction to children, with such practical directions and exemplifications, as may tend to prepare and qualify said pupils to become teachers of youth." These recommendations of the sub-committee were adopted by the whole board, but the City Government failed to make the necessary appropriations.

On the 12th of January, 1849, a committee consisting of Messrs.

Jenks, Spence and Neale, were appointed to investigate the subject still further; this committee reported in favor of the immediate establishment of two seminaries for the higher instruction of girls, "as demanded by the judgment of the community, the dictates of justice and the positive injunctions of law." They accordingly ask the appropriation of $3,000 to fit up the halls before recommended, and of $7,000 for the current expenses of the institutions. No action was had on these recommendations by the City Authorities.

In his first annual report to the School Committee, submitted Dec. 30th, 1851, the Superintendent of Public Schools, (Nathan Bishop,) recommended "the establishment of a Normal School, as a part of the Boston system of Public Instruction." "It is due to the inhabitants of this city to establish an institution in which such of their daughters as have completed with distinguished success the course of studies in the Grammar Schools, may, if they are desirous of teaching, qualify themselves in the best manner for this important employment." This recommendation was referred to a Special Committee, (composed of Messrs. Eaton, Tracy, Simonds, Simpson and Hahn,) which reported in June, 1852, in favor of establishing "a school for the single object of preparing teachers for our public schools," and "that it should be resorted to by those only who may desire to qualify themselves for teaching." "It should provide for its pupils such a course of study as would demand for its completion the earnest and devoted application of at least two years; one which would insure not only a thorough acquaintance with all the elementary, therefore, for the most essential, branches in which they may be called upon to give instruction, but which should give such a knowledge of the physical laws of health, of which there is now among many teachers such lamentable ignorance, as would enable them to take proper care of the pupils under their charge; such information in regard to the true method of calling into healthful exercise the various faculties of the mind, as would not allow one to be comparatively dormant, and urge another into over activity, and thus give a one-sided development to the mind; such a preparation for unfolding and invigorating the moral character of their pupils, as should best fit them for successfully performing the duties growing out of the various relations of life; and such views of the true character of their future vocation—of its dignity, of its power to influence deeply, and it may be ineffaceably for good or for evil, and hence of its high responsibility, as while exciting a modest distrust of their own qualifications, should at the same time arouse in them an earnest and generous determination to perform their duties with strict fidelity, and to devote to their work the whole strength of their minds and hearts."

The report was accepted by the School Committee, and on the 8th of July, 1852, the City Government authorized the establishment of a Normal School for female teachers, as a part of the system of Public Instruction.

In September, a sub-committee on the Normal School, composed of Russell, Derby and Simpson, were directed to organize the school for two hundred pupils, who were to be admitted at the age of sixteen years, after being found qualified in the studies of the Grammar Schools. The course of study and instruction prescribed, embraced a thorough review of the studies of the Grammar School, and collateral branches important to explain and illustrate the same, with special reference to instruction in the art of teaching those studies. After having satisfactorily mastered the required studies, pupils were permitted to proceed to the study of English literature, intellectual and moral philosophy, the French language, the natural sciences, and of some departments of mathematics. Music, and drawing, and lectures on physiology and hygiene, were to form a part of the regular course. The school thus organized went into operation in the fall of 1852, under the principalship of Loring Lathrop, and three assistants, and a model school under the charge of Miss Lucy D. Osborn.

But the establishment of the Normal School for female teachers did not satisfy the friends of the High Schools for Girls, who in 1853 presented a petition numerously signed, asking for such a school. This petition was referred to a committee to which J. Thomas Stevenson was chairman, who prepared a report, in which it was claimed that the city already provided in the Grammar Schools for Girls, a course of instruction as advanced as that given in schools denominated "high" in other cities of the State, and in the Normal School, "a thorough review of the studies of the Grammar School, with the addition of such collateral branches as are important for the explanation and illustration of those studies." The report concludes by discouraging any present extension of the means of instruction for girls. But in 1854, the School Committee converted the Normal School into a High School for Girls, by opening it to all who possessed the required qualifications for admission without restriction as to any intention or wish to engage in teaching. It was provided at the same time, that a Normal Class should be formed for the latter. The report of the School Committee for 1861, contains the following notice of the Girls' High and Normal School, after speaking of the Latin and English High School for boys.

> While our city was thus liberally providing for the education of her sons, carrying them on from the Primary, through the Grammar Schools, to the Latin or the English High School, her daughters, after learning all that was taught in the Grammar Schools, were compelled to resort to private schools for instruction in the

higher branches of knowledge. In order to give them the same advantages as the boys, and at the same time to train up and qualify teachers, the GIRLS' HIGH AND NORMAL SCHOOL was instituted in 1852. The course, at first limited to two years, was afterwards extended to three—the scholars passing through a Junior, Middle, and Senior year. The instructors are now fourteen in number, a master, nine female assistants, and four male teachers who have charge of the departments of Drawing, French, German, and Vocal Music. An examination of candidates for admission is held on the two days following the Annual Exhibitions and Festival in July; when the candidates, the greater part of whom are graduates from the Grammar Schools, are required to prepare written answers to printed questions in Geography, Arithmetic, Grammar, and History. They are also examined in Reading, Writing, Spelling, and Oral Arithmetic. More than one thousand pupils have been admitted to this school. At the examination in July, there were one hundred and fifty-six applicants; ninety-nine were admitted unconditionally; thirty-seven on the condition of passing a second examination in one or more studies, and twenty were rejected. At the second examination in September, several new candidates presented themselves, with those conditionally received; and the whole number admitted this year is one hundred and fifty-two. The number of scholars has increased from one hundred and ninety in 1858, to three hundred and forty, twenty of whom have completed the prescribed course, and are permitted to continue their connection with the school, as an advanced class.

The pupils, after carefully reviewing their previous studies, are carried through an extended course of Natural, Intellectual, and Moral Philosophy, Astronomy, Chemistry, History, English Literature, Drawing, and Music, and the Latin, French, and German languages. They are encouraged to pursue the investigation of subjects beyond the limit of text-books, to form their own views, to express them freely and clearly, and to maintain them firmly. One of the most instructive and interesting exercises of this school is the analysis and criticism of the thoughts and sentiments of standard English authors, by the classes, under the supervision of their teachers. Questions of philosophy, points of history, and matters of taste are freely canvassed. There is no better method than this for bringing out the hidden powers of the mind, giving quickness and activity to the thoughts, and communicating the ability of expressing the ideas readily, and without confusion or hesitation. Not only is there a most thorough and complete education given in this institution; but, by the peculiar methods of teaching in use here, the pupils are eminently fitted to impart knowledge to others. The training of all the mental faculties is found to be the best preparation for instructing children. It requires a large amount of learning, remarkable clearness of thought, a firm grasp of ideas, a well-disciplined mind, a thorough knowledge of the English language, and accuracy in the use of words, to teach properly even the youngest pupils in our schools. Believing that a good Normal School, in which assistants for the Grammar Departments, and instructors of the Primary Schools are prepared for their several duties, must be a High School, the projectors of this institution appropriated the greater part of the course to the higher branches. A portion of the time, however, is given to the Normal Department. Special instruction in the theory and practice of teaching is imparted to all the young ladies; and they are allowed to be absent in some cases for a few days, in others for several weeks, in order to act as substitutes for the instructors in the city schools. Three hundred and twenty-two have, at different times, availed themselves of this privilege. At the examinations of candidates for the office of teachers, graduates from this school invariably stand among the first; and their success in the various positions which they have held, and the promotion of sixteen of them already to the post of head-assistant, prove that the school is admirably fulfilling both the objects for which it was instituted. The assistant teachers of this school are all graduates of the school. In October, 1859, when it became necessary to appoint new instructors on account of the increase in the number of scholars, an examination was held after public notice given in the newspapers. The eight young ladies who stood highest at that examination, had been educated at this school; and from their number the four assistants, since appointed, have been selected.

By the Report of the City Auditor for 1861, it appears that the salaries of the teachers for the Girls' High and Normal School for that year, amounted to $8,287.50.

The following Regulations of the Girls' High and Normal School, are taken from the "RULES of the School Committee and Regulations of the Public Schools of Boston for 1861."

REGULATIONS OF THE GIRLS' HIGH AND NORMAL SCHOOL, 1861.

SECTION 1. This school is situated in Mason Street. It was instituted in 1852, with the design of furnishing to those pupils who have passed through the usual course of studies at the Grammar Schools for girls, and at other girls' schools in this city, an opportunity for a higher and more extended education, and also to fit such of them as desire to become teachers. The following are the regulations of this school, in addition to those common to all the schools.

SECT. 2. The instructors shall be, a master, and as many assistants as may be found expedient; but the whole number of assistants shall not exceed the ratio of one for every thirty pupils.

SECT. 3. The examination of candidates for admission to the schools, shall take place annually, on the Wednesday and Thursday next succeeding the day of the annual exhibition of the Grammar Schools in July.

SECT. 4. Candidates for admission must be over fifteen, and not more than nineteen years of age. They must present certificates of recommendation from the teachers whose schools they last attended, and must pass a satisfactory examination in the following branches, viz.: Spelling, Reading, Writing, Arithmetic, English Grammar, Geography, and History.

SECT. 5. The examination shall be conducted by the instructors of the school, both orally and from written questions previously prepared by them, and approved by the Committee of the school. It shall be the duty of the said Committee to be present and to assist at the examination, and the admission of candidates shall be subject to their approval.

SECT. 6. The course of studies and instruction in this school shall be as follows:—

Junior Class. Reading, Spelling, and Writing continued. Arithmetic, Geography, and Grammar reviewed. Physical Geography, Natural Philosophy, Analysis of Language and Structure of Sentences. Synonymes. Rhetoric. Exercises in English Composition. History. Latin, begun. Exercises in Drawing and in Vocal Music.

Middle Class. Natural Philosophy, continued. English Literature. Algebra. Moral Philosophy. Latin, continued. French, begun, (instruction given by a native French teacher.) Rhetoric, with exercises in Composition, continued. Physiology, with Lectures. General History. Exercises in Drawing and in Vocal Music. Reading standard English works, with exercises in Criticism.

Senior Class. Latin and French, continued. Geometry. General History. Intellectual Philosophy. Astronomy. Chemistry, with Lectures. Exercises in Composition. Exercises in Drawing and in Vocal Music. Exercises in Criticism, comprising a careful examination of works of the best English authors. Instruction in the Theory and Practice of Teaching. Such instruction in Music shall be given to all the pupils as may qualify them to teach Vocal Music in our Public Schools.

SECT. 7. The sessions of the school shall begin at 9 o'clock, A. M., and close at 2 o'clock, P. M., except on Wednesday and Saturday, when the school shall close at 1 o'clock.

SECT. 8. The plan of study shall be arranged for three years. Pupils who have attended for that period, and who have completed the course in a manner satisfactory to the teachers and the Committee on the school, shall be entitled to receive a diploma or certificate to that effect, on leaving school.

IV. FEMALE EDUCATION IN THE STATE OF OHIO.

Compiled from Report of School Commissioner (Anson Smyth,) August 31, 1862.

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1. Out of 928,890 youth between five and twenty-one years of age, 723,669 were enrolled in the Common Schools, in the year ending August 31, 1862. Of this number (723,669) 348,147, were females.

2. Of the 21,390 teachers employed in the Common Schools during the year, 10,931 were females.

3. In twenty-three incorporated institutions, styled Colleges and Seminaries, (all designed to give to females an education superior to that given in the Academies and High Schools for boys, and several claiming to give an appropriate and equivalent instruction to that given in colleges for male youth,) there were 1,636 pupils in the regular courses, which extended through four, and in two institutions to five years, besides 1,169 in partial and preparatory courses. These institutions have large buildings, many possess extensive grounds, and some are well equipped with the best apparatus of instruction, and the best facilities of residence. These grounds and buildings cost $876,000, approximating closely to the value of the colleges for males, which are returned at $932,000. Of these institutions, for female pupils, we give the tabulated statements of the Commissioner.

Of the organization, studies, and discipline, including the residence and domestic training of the pupils, of the Female College at College Hill, the Western Female Seminary at Oxford, and the Female Department of Oberlin College, as types of the studies and aims of female education in one of the largest and most advanced communities of the country, we hope to give a detailed account hereafter. These institutions for female education have marked peculiarities which distinguish them from seminaries having the same general aims in the Eastern States and in Europe.

4. These statistics of female education do not include a large number of private institutions of different grades, academic, and otherwise, of which, several numerously attended, are under the auspices of the Catholic Church.

FEMALE SEMINARIES AND COLLEGES IN OHIO, FOR THE YEAR 1862.

Name of Institution.	Location.	When opened.	Years occupied in regular Seminary Course.	Pupils pursuing regular course of studies.	In partial or preparatory course.	Graduates in 1862.	Total number of graduates.	Number of teachers.	Value of buildings, sites, etc.	Endowments exclusive of buildings, etc.	Volumes in libraries.	Value of apparatus.	Annual expense, exclusive of "extras."	Date of next commencement.
Steubenville Female Seminary,	Steubenville,	1829	3	66	65	16	443	12	$25,000	.....	4,000	$3,000	$175	March 27
Granville Female College,	Granville,	1832	4	72	59	10	300	10	20,000	.....	2,000	800	150	June 24
Springfield Female College,	Springfield,	1834	4	52	53	7	68	4	15,000	.....	500	.....	.....	June 26
Putnam Ladies' Seminary,	Putnam,	1835	5	.....	64	7	170	5	25,000	$10,000	1,000	1,000	175	July 9
Female Department of College,	Oberlin,	1835	4	213	226	28	311	12	.....	.....	2,000	1,000	.....	Aug. 25
Wesleyan Female College,	Cincinnati,	1842	4	90	39	16	315	15	65,000	.....	3,000	600	.....	June 18
Cooper Female Seminary,	Dayton,	1845	4	30	20	8	50	7	15,000	.....	500	200	160	Sept. 5
Hillsboro Female College,	Hillsboro,	1847	4	80	10	4	47	6	40,000	.....	1,000	.....	.....	Aug. 31
Ohio Female College,	College Hill,	1849	4	116	45	17	140	20	80,000	.....	3,000	.....	200	June 11
Oxford Female Institute,	Oxford,	1849	4	80	58	2	140	8	10,000	.....	300	500	160	June 18
Cincinnati Female Seminary,	Cincinnati,	1850	4	90	35	....	48	11	30,000	.....	3,000	5,000	.....	June 20
Xenia Female College,	Xenia,	1850	4	74	44	2	48	6	15,000	.....	300	500	132	June 25
Springfield Female Seminary,	Springfield,	1852	4	70	96	13	131	9	25,000	.....	800	500	150	June 24
Ohio Wesleyan Female College,	Delaware,	1853	4	52	194	18	88	7	42,000	.....	.....	500	.....	July 23
Oxford Female College,	Oxford,	1854	4	50	16	2	66	8	100,000	.....	1,000	1,000	175	June 24
Cleveland Female Seminary,	Cleveland,	1854	5	108	.....	2	17	13	40,000	.....	600	1,500	200	June 18
Mount Vernon Female Seminary,	Mount Vernon,	1854	4	20	15	3	26	4	12,000	.....	.....	.....	.....	June 24
Mansfield Female Seminary,	Mansfield,	....	4	100	25	3	30	7	20,000	.....	500	300	160	June 24
Glendale Female College,	Glendale,	1854	4	26	27	3	53	8	42,000	.....	1,500	800	200	June 18
Mount Auburn Young Ladies' Institute,	Mount Auburn,	1855	....	152	27	6	15	13	75,000	.....	1,500	1,200	300	June 20
Western Female Seminary,	Oxford,	1855	3	101	.....	9	103	10	90,000	20,000	679	.....	100	July 9
Union Female Seminary,	Xenia,	1858	4	40	35	3	10	6	20,000	.....	.....	.....	160	June 24
Lake Erie Female Seminary,	Painesville,	1859	3	54	16	12	33	7	70,000	.....	250	.....	90	July 16
Total,	.....	....	....	1,736	1,169	191	2,652	208	876,000	30,000	27,429	17,900		

V. PROFESSIONAL TRAINING OF TEACHERS.

The experience of every country where the schools, public, parochial, or private, have attained any high degree of excellence, and the teachers are respected for their personal and professional worth, has demonstrated that early and continued success in the work of instruction, and in the management of educational institutions generally, demands not only certain qualities of mind and character, and an amount and kind of scholarship equal at least to the standard aimed at in the schools, but special preparation in knowledge and methods, and continued efforts at self and professional improvement to obviate the inevitable tendencies of an isolated and monotonous occupation. To secure this preliminary training, and progressive improvement in individual teachers, to exclude from the profession unworthy and incompetent members, to give opportunities of a generous genial culture as the basis of all special studies, and the source of a powerful unconscious tuition in manner, character, and daily life, to protect all who follow the business of teaching from pecuniary anxiety, and increase their means of personal happiness and social influence, various institutions, agencies, and measures, legal and voluntary, have been resorted to, at different times, and in different countries. We here briefly enumerate some of these Institutions and Agencies, which will be more particularly described elsewhere.

I. Religious Communities, or Associations of persons, who, having served a severe and prolonged novitiate, or preparatory course to test their vocation, devote themselves for life, and without pecuniary fee, or worldly reward, to the business of instruction. Such were the Benedictines, the Hieronymians, or Brethren of the Common Life, the Oratorians, the Brothers and Sisters of St. Francis of Paola, and other religious orders which have done their work, and given way to the Jesuits, the Ursulines, the Brethren of the Christian Schools, (*Institut des Frères des Ecoles Chrétiennes,*) and other teaching communities, whose schools are found in every country where the Catholic Church is established. The Mother House of

each of these orders, where the novitiate is served, is, strictly speaking, a Normal School, having its *norma*, or rule or pattern of professional life and practice. It is at the same time the home, where help, and rest and health are sought by its members in need, exhaustion, and old age. Several of these Houses preceded the establishment of Teachers' Seminaries which are the creation of the State.

II. Institutions, supported or aided by the government for the purpose of training teachers for the schools which the State has undertaken to establish to protect itself from the ignorance of any portion of its people, or to add to its resources of strength and production the cultivated intellect and restrained passions of all its citizens. These institutions are called by different names, and are organized and managed on different plans in different countries, but in all, their aims and functions are special, viz., to give to young men and women, found qualified in age, character, and scholastic attainments, a practical knowledge of the labors and duties of the schoolroom. In most of the German states, where they first received governmental recognition, they are called Teachers' Seminaries or Normal Schools, although the latter designation was originally applied in Austria, to a select class in certain prominent schools composed of pupils who were receiving special instruction, and at the same time were employed as assistants in the school. In England they are called Training Colleges.

III. Classes, or departments in one or more of the best schools in the chief towns, composed of scholars who have mastered the studies of the school, and show an aptness and desire to teach. These pupils receive additional and special instruction, and are employed at a small and increasing compensation, first as assistants, then as under masters, and finally as head masters. This plan of training teachers for the public schools, especially in large towns, is the main reliance of the government in Austria and Holland, and with some modifications by which the best pupil-teacher become Queen's Scholars in the Training Colleges, in England. It is an admirable preliminary test and preparation of candidates for the regular Normal School, and might profitably be made supplementary to the latter.

IV. Courses of Lectures in all Higher Seminaries of Learning on the History, Principles, and Art of Education—designed particularly for such students as propose to teach or may be called on to organize and administer schools. Such lectures are delivered in many universities of Germany, and theological students are required to attend as a necessary preparation for the right performance of the

duties of school inspectors and local school committees, which are always, although not exclusively, composed of clergymen. Such instruction, whether given by lectures, or by class-book and recitation, should be deemed essential to graduation in any College or Academy or High School, which are the natural sources to supply teachers to the schools below. Originally the degree of Bachelor and Master of Arts were evidence of the scholarship and authority of the holders to establish, teach, and govern schools. Such knowledge should enter into the training of all liberally educated American citizens, whose services are in constant demand as trustees and committees of schools of different grade. When such courses are supplemented by practical training in a Normal School, it forms a valuable part of the professional education of a teacher.

V. Itinerating Normal Agents and Organizers of Schools, to hold Teachers' Institutes, to act as Inspectors of Schools, assist in the establishment of new institutions, and imparting life and efficiency to schools which have run down under inefficient teachers, and bring up to a normal standard the schools and the public sentiment of particular districts. The efforts of an indefatigable Normal Agent like William S. Baker, so highly appreciated in Connecticut and Rhode Island, or of a School Organizer like those sent out by the Commissioners of National Education in Ireland, or the British and Foreign School Society, by familiar conversation with teachers, and practical illustrations in their schoolrooms, of improved methods of arranging the studies, and conducting schools will reach more widely than a Normal School.

VI. Teachers' Institutes, or gatherings of teachers, both for conference and instruction, for a period of not less than one, nor more than four weeks, in successive years in different localities, and including in its operations school officers and parents. Such gatherings of teachers, old and young of both sexes, and of schools of different grades; in such numbers as will develop the sympathies and power of a common pursuit, and yet not so large as to exclude the freedom of individual thought and action; for a period of time, long enough to admit of a systematic plan of operations, and yet not so protracted as to prove a burdensome expense, or an interruption to other engagements; under the direction of men, whose claim to respect and continued attention is their large experience and acknowledged success as educators and teachers; in a course of instruction, at once theoretical and practical, combined with opportunities of inquiry, discussion, and familiar conversation—such gatherings of teachers so organized and conducted as to exclude professional jealousy, and at the same time to enlist the coöperation and attendance of school

officers and parents, by assigning to the evening lectures and discussions, all topics of general interest to the community, as well as to teachers, will begin the work of renovation and improvement at once in the home and the school, in the heads and hearts of parents, in the enthusiasm, enlarged knowledge and practical skill of teachers, and in the well considered and liberal action of school officers, and the public generally.

VII. A system of examination, by which only persons of the right spirit, character, attainments, and practical skill, are licensed to teach, combined with modes of school inspection, by which incompetent and unworthy members are excluded from the profession.

VIII. Plans of associations of the teachers of a school, city, or larger district, for periodical conferences for mutual and professional improvement, and for occasional visits to each others' schools.

IX. Legal recognition of the true value of the teacher's office, by exemption from all services which interfere with the full performance of its duties, or imply that the constant care and highest nurture of children and youth are of secondary interest; and by provision for its permanence and adequate compensation, independent of the negligence or parsimony of parents and municipal authorities.

X. A system of promotion from a less desirable school, to one more so in respect to studies, location, and salary, dependent not upon favoritism, but upon an open and impartial examination.

XI. Access to books on the theory and practice of teaching, and to educational periodicals, by which the young and inexperienced teacher is made acquainted with the views of experienced teachers in his own and other times, in his own and other countries.

XII. Facilities for the acquisition of some industrial pursuit, out of school hours, which will add to the happiness and emoluments of the teacher, without diminishing his personal influence as the educator of the community.

XIII. A system of savings, aided and guaranteed by the government, but founded in habits of thrift and forecast in the teachers, by which provision is made for themselves in old age, or sickness, and for their families, in case of death.

By these and other institutions, agencies, and means, already recognized or established to some extent, the office of teacher has been greatly elevated in usefulness and in social and pecuniary consideration. It is the object of this work to bring together the experience of different states in this most important department of the whole field of educational labor, as presented in official documents, and the observations of intelligent and trustworthy educators.

VI. TEACHER'S CONFERENCES

AND OTHER MODES OF PROFESSIONAL IMPROVEMENT.

I. CITY OF CHICAGO.

The Rules of the Board of Education in the city of Chicago provide—in addition to a weekly meeting of all the teachers of each of the large graded schools, both High and District, in their several school-houses, for the purposes of discussing and illustrating methods of discipline and instruction, and the general interests of the school—for an *Institute* to be held as follows:

It shall be the duty of all the teachers of the Public Schools to meet on the first Saturday of each school month, at the High School building, for the purpose of holding an Institute for their own improvement in teaching, under the direction of the Board of Education. The exercises shall commence at 9 A. M., and close at 12 M., with a recess of twenty minutes. Before the close of each Institute, the Superintendent shall adopt such measures as he shall deem best to secure a full and accurate account of the attendance of the teachers. At the close of each term, the Superintendent shall roport to the Board all cases of absence or tardiness, or leaving before the close of the Institute, that have occurred during the term.

Of the operations of these Monthly Institutes, and other means of professional improvement among the teachers of the Public Schools of Chicago, the Superintendent (William H. Wells,) in his Annual Report, submitted December 31st, 1862, thus speaks:

Monthly Meetings of Teachers.

The Monthly Institutes of Teachers have been held during the year, in accordance with the rules of the Board, and the attendance of the teachers has, in most cases, been regular and prompt. The time has been occupied with model exercises of classes from the different schools, drill exercises of classes composed of teachers, reading the "*Chicago Teacher*," conducted by the ladies, lectures, discussions, and remarks by the Superintendent.

The number of teachers is now so much increased that it is found impracticable to introduce drill exercises in any portion of the course of study, that will be equally profitable to all. Teachers of the first and second grade classes have no special interest in exercises adapted to the ninth and tenth grade classes, and *vice versa*. To remedy this evil, we have adopted the plan of having the general exercises of the Institute during the first part of the forenoon, with all the teachers together, and dividing the Institute into five sections during the last hour for drill exercises and discussions adapted to the wants of the several sections. Teachers of the first and second grade classes constitute the first section; those of the third and fourth grade classes, the second section, and so on

through all the grades. Each section, embracing two grades of the course, has one or more drill exercises every month. By this arrangement, we have five exercises going forward simultaneously, and the teachers of each section take up only those subjects in which they are particularly interested.

The management of the Institute has been left by the Board in the hands of the Superintendent, and it has been my uniform practice to invite a committee of the teachers to aid me in arranging the successive programmes of exercises. In most other cities, the programme of exercises is always prepared by the Superintendent. This is a safeguard against the introduction of discussions upon the policy and measures of the Board of Education, and other irrelevant topics. Except in the matter of attendance, the course I have adopted has given to the Institute much of the freedom of a voluntary association, and thus far I have found very few evils resulting from it. I do not recollect a single instance during the past year in which the committee have desired to introduce a subject for discussion that I did not approve.

The teachers have performed cheerfully the parts assigned them, and the interest of the meetings has been well sustained through the year.

The advantages resulting from frequent meetings of teachers, especially in cities and larger towns, are now generally admitted, and every teacher who is desirous of advancing in his profession, finds that he can derive important aid from a careful comparison of his own views and methods with those of other teachers. But nothwithstanding this general agreement of opinion respecting the value and importance of Teachers' Institutes, there is still very great diversity of practice in different cities and towns respecting the frequency or infrequency of holding them, the manner in which they are conducted, and the voluntary or involuntary character of the attendance.

For the purpose of ascertaining the opinions of prominent educators on this subject, and the practice of different cities, I recently sent out letters of enquiry to nearly all the principal cities of the Northern States. The answers received from over one hundred different towns, have put me in possession of very full and satisfactory information on all the points to which I have alluded. The following is a condensed summary of the results:

1. In most of the cities of the Western States, the engagements with teachers are made with the express understanding that they shall attend Institutes for professional improvement as often as once a month. These meetings are usually held on Saturdays, and the sessions are from two to three hours in length. In most cases, an account is kept of the attendance of the teachers, and absences from the Institutes are regarded the same as absences from any of the regular sessions of the schools. In many Western cities, more than one half of the whole number, the Institutes are held as often as twice in a month; and in as many as ten or twelve cities, every week.

In more than half of the cities of the Middle States, the teachers are required to attend Institutes as often as once a month, but this practice, except in Pennsylvania,* is not so general in the Middle as in the Western States.

In the New England States, there is not one city in ten in which the rules of the School Directors require the teachers to hold meetings for professional

*An Act was passed in April, 1862, requiring all the teachers of the public schools to devote two Saturdays of each month to exercises or Institutes for their mutual improvement.

improvement so often as once a month, and in most Eastern cities, the Directors have no rule on this subject.*

2. Another means of improving the qualifications of teachers, is the organization of Saturday Normal Classes, which all teachers of limited experience, or those holding certificates below the first grade, are expected to attend.†

In some cities, attendance at the Normal Classes is optional with the teachers, and in others it is required by the rules of the Directors.

In a few cases, the weekly Normal Classes are designed to benefit both the assistants already employed in the schools, and the candidates for situations in them. In Baltimore, no applicant is eligible to an appointment as assistant, till she has first attended at least twenty-six sessions of the Normal Class.

The labors of the faithful teacher are sufficiently exhausting, without the additional effort of preparing several lessons to be recited at the close of every week, and the time required to attend the weekly Normal Class during a series of terms or years, is greatly needed for healthful relaxation and exercise. While, therefore, I take pleasure in reporting the increased attention that is given to monthly and semi-monthly Institutes of Teachers, I must be allowed to express the opinion, that weekly Normal Classes of Teachers can never meet with general favor among judicious friends of education.

3. Voluntary associations of teachers for purposes of professional improvement, have generally failed to accomplish the object sought. The testimony on this point is abundant and unequivocal. There are few cities in which these associations secure the constant attendance of even half the number of teachers connected with the schools; and most of the voluntary associations that have maintained a permanent existence, have been composed chiefly of Masters and teachers of the higher grades, and have failed to reach and benefit the great body of Grammar and Primary assistants.

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*The following classified list embraces most of the cities which belong to either of the divisions described above:

Attendance at Institutes required once a month.—Buffalo, N. Y.; Cincinnati, virtually—and Columbus, O.; Detroit, Mich.; Louisville, Ky.; Evansville, Ind.; Chicago, Springfield; Warsaw, and Alton, Ill.; St. Louis, Mo.; St. Paul, Min.

Attendance required once in two weeks.—Brattleboro', Vt.; Norwich, Conn.; Rochester and Syracuse, N. Y.; Mansfield, Norwalk, Toledo, and Zanesville, O.; Grand Rapids, Ann Arbor, Kalamazoo, and Adrian, Mich.; Indianapolis and New Albany, Ind.; Peoria, Quincy, Galena, and Galesburg, Ill.; Kenosha, Wis.; Dubuque, Iowa.

Attendance required once a week.—Oswego, two terms in a year, Elmira, two terms in a year, and Schenectady, N. Y.; Sandusky, O.; Fort Wayne, Ind.; Newport, Ky.; Rock Island, Ill.; Davenport, Iowa; Racine, Madison, Janesville, and Sheboygan, Wis.

No rule requiring attendance as often as once a month.—Portland, Bangor, Brunswick, Bath, Me.; Manchester, Concord, Nashua, Portsmouth, N. H.; Burlington, Vt.; Boston, Charlestown, Lowell, Cambridge, Lawrence, Roxbury, Salem, Newburyport, New Bedford, Gloucester, Worcester, Fall River, Mass.; Hartford, New Haven, New London, Conn.; Providence, Bristol, Newport, R. I.; New York, Brooklyn, Troy, Albany, Utica, N. Y.; Philadelphia, Penn.; Baltimore, Md.; Wilmington, Del.; Cleveland and Dayton, O.; Dixon, Ill.; Des Moines, Iowa City, Cedar Rapids, Muscatine, Iowa; Minneapolis, Minn.

Returns have been received from about twenty cities not embraced in the foregoing classes. Some of these are included in the list of cities requiring Saturday Normal Classes, some are governed by the special law of Pennsylvania, and in others the teachers are called together at irregular intervals.

†Schools of this description have been established in New York, Brooklyn, and Buffalo, N. Y.; Concord, N. H.; Newark and Patterson, N. J.; Bloomington, Ill.; Baltimore, Cincinnati, St. Louis, San Francisco, and a few other cities. In St. Louis, New York, Brooklyn, and Concord, these schools have, for various reasons, been either suspended temporarily, or entirely abandoned.

4. The numerous letters received from different portions of the country, afford the fullest evidence of a growing interest in the professional improvement of teachers; and in several instances, the more active and progressive teachers have themselves requested the Directors to establish Institutes, which all the teachers should be required to attend.

In cities where Teachers' Institutes are established by order of the School Directors, the best teachers are generally the most ready to attend, and the most interested in the exercises; while those who really need them most are usually the first to complain that they are burdensome, uninteresting, and profitless.

The greatest obstacle to the success of Teachers' Institutes, is found in the feeling which still prevails to a considerable extent, that they encroach upon the time that properly belongs to the teachers. No effort should be spared to remove this impression, and secure the cheerful attendance of the teachers upon the meetings, and their hearty interest in them. The first and most important measure to be adopted, is to have a full and definite understanding, that all engagements with teachers include attendance upon the Institutes and an active participation in their exercises; and that absence from one of these meetings is quite as important a neglect of duty as absence from school during any of the regular sessions. Another means of securing this object would be the establishment of uniformity in the practice of different cities. If the custom of devoting a certain number of hours in a month to exercises for mutual improvement was universal, no teacher would think of objecting to it. We are not to expect that this uniformity will be secured at once, but the practice of exchanging school reports, which is every year increasing, is already exerting a manifest influence in this direction. If each member of the Board, in this and other cities, would spend but two or three hours in the year at these meetings, it would do very much to encourage the teachers, and stimulate them to put forth their best efforts to render the exercises interesting and profitable.

Practical drill exercises, on some subject connected with the daily routine of the school-room, and in which all the teachers are expected to take a part, should form a part of the programme of every Teachers' Institute. It is those who sit as passive listeners, or in passive listlessness, that are not interested and not benefited.

Teachers' Meetings in School Hours.

In Boston* and Chicago, and a few other cities, the Superintendents are authorized to call occasional meetings of certain classes of teachers in school hours, for the purpose of discussing methods of instruction and discipline. In most cases, the teachers that are called together for this purpose, dismiss their divisions for the half day; but a single division or class is sometimes retained for purposes of experimental instruction.

In some cities, all the teachers of each school are called together by the Principal once a week, for the purpose of conferring together respecting the general interests of the school.

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* The following is the rule of the Boston School Committee:

"The Superintendent shall advise the teachers on the best methods of instruction and discipline, and, to illustrate these methods in respect to Primary Schools, he shall hold occasional meetings of the teachers of the schools, and have authority to dismiss the Primary Schools at such time as he shall deem advisable, not exceeding one-half day in each quarter. He has authority, also, to dismiss the Grammar Schools, not exceeding one-half day in each half year, for the purpose of holding meetings, of the teachers of these schools."

The teachers of our High School have a regular weekly meeting, which has been sustained from the organization of the school to the present time.

I have an abiding conviction that these meetings may be made to exert a highly beneficial influence; and I would respectfully recommend that a rule be adopted requiring each of the Principals to dismiss his school an hour before usual time of closing, one day in a week, for the purpose of holding a meeting of the teachers, to discuss methods of instruction and discipline, and confer together respecting the general interests of the school.

As a specimen of the manner in which the progress of teachers in knowledge and spirit was kept up in Prussia, under the lead of School-Counselor Bernhardt, we append an extract from his journal of the last week's proceedings of a Teacher's Conferences.

IMPROVEMENT OF SCHOOL-TEACHERS.

At the commencement of the late school efforts in Prussia, for the benefit of teachers already in the profession who had not possessed the advantages of a regular training, it was the custom for them to assemble during the weeks of vacation in their schools, and, under the care of a competent teacher, go through a regular course of lessons for their improvement. Of the entire course a careful and minute journal was kept and transmitted to the government. The following is from the journal of a four weeks' course of this kind, which was held at Regenwald in 1821, under the charge of School-Counselor Bernhardt. The King gave his special approbation of this journal, and caused a large number of copies to be printed and circulated throughout the kingdom. The Minister of Public Instruction expresses himself respecting it in the following terms:—

"The view presented and acted upon by School-Counselor Bernhardt, that the important point is not the quantity and variety of knowledge communicated, but its solidity and accuracy; and that the foundation of all true culture consists in the education to piety, the fear of God, and Christian humility; and, accordingly, that those dispositions, before all things else, must be awakened and confirmed in teachers, that thereby they may exercise love, long-suffering, and cheerfulness, in their difficult and laborious calling—these principles are the only correct ones, according to which the education of teachers every where, and in all cases, can and ought to be conducted, notwithstanding the regard which must be had to the peculiar circumstances and the intellectual condition of particular provinces and communities. The Ministry hereby enjoin it anew upon the Regency, not only to make these principles their guide in their own labors in the common schools and Teachers' Seminaries, but also to commend and urge them in the most emphatic manner on all teachers and pupils in their jurisdiction. That this will be faithfully done, the Ministry expect with so much the more confidence, because in this way alone can the supreme will of his Majesty the King, repeatedly and earnestly expressed, be fulfilled. Of the manner in which the Regency execute this order, the Ministry expect a Report, and only remark further, that as many copies of the journal as may be needed will be supplied."

The strongly religious character of the instructions in the following journal will be noticed; but will any *Christian* find fault with this characteristic, or with the King and Ministry for commending it?

The journal gives an account of the employment of every hour in the day, from half past six in the morning to a quarter before nine in the evening. Instead of making extracts from different parts of it, I here present the entire journal for the last week of the course, that the reader may have the better opportunity of forming his own judgment on the real merits of the system.

FOURTH WEEK.

Monday, Oct. 22.—A. M. 6½–7. Meditation. Teachers and parents, forget not that your children are men, and that, as such, they have the ability to become reasonable. God will have all men to come to the knowledge of the truth. As men, our children have the dignity of men, and a right to life, cultivation, honor, and truth. This is a holy, inalienable right, that is, no man can divest himself of

it without ceasing to be a man. 7–8½. Bible instruction. Reading the Bible and verbal analysis of what is read. Jesus in the wilderness. 9–12. Writing. Exercise in small letters. P. M. 2–5. Writing as before. 5½–7. Singing. 8–8¾. Meditation. Our schools should be Christian schools for Christian children, and Jesus Christ should be daily the chief teacher. One thing is needful. Jesus Christ, the same yesterday, to-day, and forever. The great end of our schools, therefore, is the instruction of children in Christianity; or the knowledge of heavenly truths in hope of eternal life; and to answer the question, What must I do to be saved? Our children, as they grow up, must be able to say, from the conviction of their hearts, We know and are sure that thou art the Christ, the Son of the living God. Beloved teachers, teach no Christianity without Christ, and know that there cannot be a living faith without knowledge and love.

Tuesday, Oct. 23.—A. M. 6–7. Meditation. Christian schools are the gardens of God's Spirit, and the plantations of humanity, and, therefore, holy places. How dreadful is this place! This is none other than the house of God. Teachers, venerate your schools—regard the sacred as sacred. 7–8½. Bible instruction. Reading of the Bible and verbal analysis of what is read. Luke xv. 1–10. 8½–9. Catechism. Repeating the second article with proper emphasis, and the necessary explanation of terms. 10–12. Writing. Exercise in German capitals, with the writing of syllables and words. P. M. 1–4. General repetition of the instructions for school-teachers given during the month. 4–5. Brief instruction respecting school discipline and school laws. 5–7. Singing. 8–8½. Meditation. Teachers, you should make your school a house of prayer, not a den of murderers. Thou shalt not kill—that is, thou shalt do no injury to the souls of thy children. This you will do if you are an ungodly teacher, if you neglect your duty, if you keep no order or discipline in your school, if you instruct the children badly, or not at all, and set before them an injurious example. The children will be injured also by hurrying through the school-prayers, the texts, and catechism, and by all thoughtless reading and committing to memory. May God help you!

Wednesday, Oct. 24.—6–6¾. Meditation. Dear teachers, you labor for the good of mankind and the kingdom of God; be, therefore, God's instruments and coworkers. Thy kingdom come. In all things approving ourselves as the ministers of God. 6¾–8½. Bible instruction as before, John iv. 1–15. 8½–9. Catechism. The correct and emphatic reading and repeating of the first section, with brief explanation of terms. 10–12. Instruction in school discipline and school laws. P. M. 1–3. Instruction in the cultivation of fruit-trees. For instruction in this branch of economy, the school is arranged in six divisions, each under the care of a teacher acquainted with the business, with whom they go into an orchard, and under his inspection perform all the necessary work. General principles and directions are written in a book, of which each student has a copy. More cooling is the shade, and more sweet the fruit, of the tree which thine own hands have planted and cherished. 3–5. Instruction in school discipline and school laws. 5¼–½. Singing. 8–9. Meditation. The Christian school-teacher is also a good husband and father. Blameless, the husband of one wife, vigilant, sober, of good behavior, apt to teach, not given to wine, no striker, not greedy of filthy lucre, patient, not a brawler, not covetous, one that ruleth well his own house, having his children in subjection, with all gravity. He that readeth, let him understand.

Thursday, Oct. 25.—A. M. 6–6¾. Meditation. Dear teachers, do all in your power to live in harmony and peace with your districts, that you may be a helper of the parents in the bringing up of their children. Endeavor to maintain the unity of the Spirit in the bond of peace. As much as in you lies, live peaceably with all men. 6¾–9. Bible instruction as before, Luke vii. 11–17. Reading by sentences, by words, by syllables, by letters. Reading according to the sense, with questions as to the meaning. Understandest thou what thou readest? 10–11. Instructions as to prayer in schools. Forms of prayer suitable for teachers and children are copied and committed to memory. Lord, teach us to pray. 11–12. Writing. Exercise in capitals and writing words. P. M. 2–3. Instruction respecting prayer in the family and in the school. Forms of prayer for morning and evening, and at the table, are copied, with instructions that school children should commit them to memory, that they may aid their parents to an edifying performance of the duty of family worship; that, as the school

thus helps the family, so the family also may help the school. Use not vain repetitions. 3–5. Bible instruction. General views of the contents of the Bible, and how the teacher may communicate, analyze, and explain them to his children, yearly, at the commencement of the winter and summer terms. 5½–7. Singing. 8–9. Meditation. Teachers, acquire the confidence and love of your districts, but never forsake the direct path of duty. Fear God, do right, and be afraid of no man. The world, with its lusts, passeth away, but he that doeth the will of God shall abide forever.

Friday, Oct. 26.—Meditation. Teachers, hearken to the preacher, and labor into his hands; for he is placed over the Church of God, who will have the school be an aid to the Church. Remember them that labor among you, and are over you in the Lord, and esteem them highly in love for their works' sake. Neither is he that planteth any thing, nor he that watereth any thing, but God who giveth the increase. 7–9. Bible instruction. Summary of the contents of the Bible, to be committed to memory by children from ten to fifteen years of age. 10–12. Bible instruction. Brief statement of the contents of the historical books of the New Testament. P. M. 1–5. Bible instruction. Contents of the doctrinal and prophetical books of the New Testament. Selection of the passages of the New Testament proper to be read in a country school. A guide for teachers to the use of the Bible in schools. 5–7. Singing. 8–9. Meditation. Honor and love, as a good teacher, thy King and thy father-land; and awake the same feelings and sentiments in the hearts of thy children. Fear God, honor the King, seek the good of the country in which you dwell, for when it goes well with it, it goes well with thee.

Saturday, Oct. 27.—6–6½. Meditation. By the life in the family, the school, and the church, our heavenly Father would educate us and our children for our earthly and heavenly home; therefore parents, teachers, and preachers, should labor hand in hand. One soweth and another reapeth. I have laid the foundation, another buildeth thereon; and let every man take heed how he buildeth thereon. Means of education: 1. In the family—the parents, domestic life, habits; 2. In the school—the teacher, the instruction, the discipline; 3. In the church—the preaching, the word, the sacraments. 6½–9½. Bible instruction. Rules which the teacher should observe in reading the Bible. In analyzing it. In respect to the contents of the Old Testament books, and selections from them for reading, written instructions are given and copied, on account of the shortness of the time which is here given to this topic. 10–12. Bible instruction. General repetition. P. M. 1–4. Bible instruction. General repetition. 4–5. Reading. Knowledge of the German language, with written exercises. 7–10½. Review of the course of instruction and the journal. 10½–12. Meditation. The prayer of Jesus (John xvii.), with particular reference to our approaching separation.

Sunday, Oct. 28.—6½–9. Morning prayer. Catechism. Close of the term. (In the open air on a hill at sunset) singing and prayer. Address by the head teacher. Subject. What our teacher would say to us when we separate from him. 1. What you have learned apply well, and follow it faithfully. If ye know these things, happy are ye if ye do them. 2. Learn to see more and more clearly that you know but little. We know in part. 3. Be continually learning, and never get weary. The man has never lived who has learned all that he might. 4. Be yourself what you would have your children become. Become as little children. 5. Let God's grace be your highest good, and let it strengthen you in the difficulties which you must encounter. My grace is sufficient for thee—my strength is perfect in thy weakness. 6. Keep constantly in mind the Lord Jesus Christ. He has left us an example that we should follow his steps. Hymn—Lord Jesus Christ, hearken thou to us. Prayer. Benediction.

Review of the hours spent in different studies during the four weeks. Arithmetic, sixty-seven; writing, fifty-six; Bible, twenty-five; meditation, thirty-six; other subjects, twenty-six; singing, twenty-eight. Total, two hundred and thirty-eight. From nine to ten, in the morning, was generally spent in walking together, and one hour in the afternoon was sometimes spent in the same manner.

Familiar lectures were given on the following topics: 1. Directions to teachers as to the knowledge and right use of the Bible in schools. 2. Directions to teachers respecting instruction in writing. 3. Directions for exercises in mental arithmetic. 4. Instructions respecting school discipline and school laws. 5. A col-

lection of prayers for the school and family, with directions to teachers. 6. The German parts of speech, and how they may be best taught in a country school. 7. The day-book.

Printed books were the following: 1. Dinter's Arithmetic. 2. Dinter on Guarding against Fires. 3. Brief Biography of Luther. 4. On the Cultivation of Fruit-Trees. 5. German Grammar. 6. Baumgarten's Letter-Writer for Country Schools. 7. Luther's Catechism.

That which can be learned and practiced in the short space of a few weeks, is only a little—a very little. But it is not of so much importance that we have more knowledge than others; but most depends on this, that I have the right disposition; and that I thoroughly understand and faithfully follow out the little which I do know.

God help me, that I may give all which I have to my school; and that I, with my dear children, may, above all things, strive after that which is from above. Father in heaven, grant us strength and love for this.

See National Education in Europe, by Henry Barnard.

VII. HISTORY

OF

NORMAL SCHOOLS IN FRANCE.

THE earliest movement towards the professional training of teachers was made in France by the Abbe de Lasalle, while canon of the Cathedral at Rheims, in 1681, and perfected, in his training school for his Institute of the Brothers of the Christian Schools, in 1684.

In 1794, by an ordinance of the National Convention a normal school was established at Paris to furnish professors for colleges and the higher seminaries. The institution was projected on a scale beyond the preparation which its earliest pupils could bring, and beyond the wants to be supplied. The instruction was mainly by lectures, which were delivered by Lagrange, Laplace, Sicard, Laharpe, and other distinguished teachers and men of science. The experiment was abandoned in 1795, and not resumed till 1808, when Napoleon re-established the school in the ordinance creating the "Imperial University of France." It has since been maintained for the purpose of training a class of pupils for professorships in the colleges and secondary schools.

In 1810 the first seminary designed for teachers of elementary schools, was established at Strasbourg, through the liberality of Count de Lezai Marnesia, and the co-operation of the Rector of the Academy, and the prefect of the department of the Lower Rhine. It opened in 1811 as a "Normal class of primary school teachers." No pupil was admitted who was under sixteen years of age, or over thirty, or who was not acquainted with the studies pursued in elementary schools. The course embraced four years, and included as wide and thorough range of studies as is now required in the best Normal Schools of France. The number of pupils was limited to sixty, and those who enjoyed the benefit of a bourse, or scholarship, came under obligation to teach at least ten years in the schools of the department. Those scholarships were founded partly by individual liberality, and partly by the department, and by the communes, which sent candidates to the school. Under the organization established in 1810, with such modifications as experience suggested, this school has continued to exert a powerful influence on the cause of popular education through that section of France, and it now ranks not only as the oldest, but one of the best in Europe. The department of Upper Rhine, witnessing the results of this experiment in the neighboring communes, appropriated six thousand francs to found scholarships, for the benefit of a certain number of candidates in the seminary at Strasbourg. According to a Report of M. Guizot to the King, in 1833, it appears that the state of primary education in the two departments constituting the Acad-

emy of Strasbourg, was far in advance of any other section of France. Good schools were more numerous; fewer communes were destitute of schools; and the slow and defective method of individual instruction had given place to more lively and simultaneous methods of class instruction. "In all respects the superiority of the popular schools is striking, and the conviction of the people is as general that this superiority is mainly due to the existence of this Normal School."

The establishment of two Normal Schools for the departments of Moselle and Meuse, in 1820, was followed by the same results,—the establishment of schools in communes before destitute, and the improvement of schools already in operation, by the introduction of better methods. In 1828 a new impulse was given to educational improvement by public-spirited individuals and teachers' associations in Paris, and other parts of France, which led to the establishment of a fourth Normal School in the department of Vosges, and a fifth in that of Meuth. About the same time a Normal course of instruction was opened in the college of Charleville, for the department of Ardennes, and the foundations of superior Normal Schools were laid at Dijon, Orleans, and Bourges, as well as a Training School for the Brothers of the Christian Doctrine at Rouen. At the close of 1829, there were thirteen Normal Schools in operation. The movement already commenced, received a new impulse in the right direction by the Revolution of 1830, which in this respect was as beneficent as the Revolution of 1791 was disastrous. In the three years immediately following the change of dynasty in 1830, thirty-four new Normal Schools were established in different sections of France, and wherever they were established they contributed to the opening of primary schools in communes before destitute, and of diffusing a knowledge of better methods among teachers who did not resort to these seminaries. But the most auspicious event was the publication of M. Cousin's "*Report on the condition of Public Instruction in several of the States of Germany, and especially in Prussia*," in 1832. A considerable portion of this report was devoted to an account of the best Normal Schools of Prussia, and to the most emphatic recommendation of the same policy in France. The following valuable suggestions were made on this subject, most of which were subsequently embodied in the Law of Primary Instruction, and the Regulations of the Minister relating to Normal Schools.

"I have already remarked, that as every *commune* must have its primary school, so every department must have its primary Normal School. If the same law which shall render the former imperative on the *communes*, should render the latter equally imperative on the departments, we should have made a great advance. If the law does not go so far as that, you must at all events come at the same results by administrative measures; you must require every council-general of a department, through the medium of the prefect, to vote funds for the establishment of a primary Normal School, under condition of binding yourself to contribute a greater or less portion of the total expenditure, and to take upon

yourself, 1. the salary of the director, whom you would nominate; 2. the books, maps, and instruments necessary for the use of the students. It must be laid down as a principle, that every department must have its Normal School; but that school should be proportioned to the extent and the wealth of the department, and it may, with equal propriety, be small in one and large in another. I take the liberty of referring to a very simple and very economical plan on which a primary Normal School may at first be organized.

Choose the best-conducted primary school in the department, that which is in the hands of the master of the greatest ability and trust-worthiness. Annex to this school a class called Normal, in which this same master shall teach his art to a certain number of young men of the department, who are willing to come to it to form themselves for schoolmasters. None should be admitted till after an examination, made by a commission appointed by you. This commission must send you the results of its labors; and it would be well that the admission of the students to the primary Normal School should be signed by you, as is the case in the admission of students to the great Normal School for the instruction of the second degree. This small Normal School ought never to be placed in a very large town, the influence of which would be adverse to that spirit of poverty, humility and peace, so necessary to the students. There is no objection to their being day-pupils, provided they are responsible for their conduct out of the house. Nor is it necessary that all should receive exhibitions, or purses, especially whole purses. In all small towns there are families in which a young man may be boarded and lodged for about 300 francs a year, ($60;) so that 3000 francs, ($600,) prudently divided into whole, half, and quarter purses, would easily defray the cost of ten or fifteen students. Give the master the title of Director of the Normal School, which would be a real gain to him, inasmuch as it would increase his consideration; and for the additional labor you impose upon him, give him a salary of 700 or 800 francs. Add a yearly allowance of 400 or 500 francs for books, maps, and other things required in teaching; and thus, for 5000 francs, ($1000,) at the utmost, you have a small Normal School, which will be extremely useful to the department. The pupils should be permitted to leave it if they choose, in a year, provided they be able to go through the examination at quitting, on which depends their obtaining the brevet of primary teacher. Yes, it rests with you, by means of a circular to this effect, addressed to all the prefects of the kingdom, to have in a few months, eighty-four small primary Normal Schools in France. The plan which I propose does not commit you to any future measures, yet it at once covers France with Normal Schools which will supply our first wants. It is for time, zeal, intelligence, and perseverance to do the rest. There must always necessarily be a great difference among the Normal Schools of our eighty-four departments; but the best way is, to go on gradually improving, in proportion as experience shows you what is required. Even with this wise tardiness, three or four years will suffice to improve all these small Normal Schools, and to raise a great number to the rank of complete great Normal Schools.

The difference between a great and a small Normal School consists in this: a small Normal School is only an appendage to a primary school, whilst a great Normal School is an establishment subsisting by and for itself, to which a primary school (and if possible that should comprise both an elementary and a middle school) is annexed.

This difference gives the measure of all other differences. In the small Normal School there are only day-pupils, or at most a few boarders. In the great, the majority may be boarders. In the one, the course may be terminated in a year; in the other, it should extend through two years, as at Bruhl; and even, in time, according to the resources of the

departments and the progress of public education, it might embrace three years, as in most of the great Normal Schools of Prussia,—Potsdam, for example. The departments must be the judges of their resources and of their wants. A department which wants twenty schoolmasters a year, and which has a certain number of middle or burgher schools, as well as many elementary schools, can very well receive twenty pupils a year; which, supposing the course to occupy two or three years, amounts to forty or sixty pupils at a time in the school. Then there must be accommodation for boarding them, a large building, a greater number of masters, more exhibitions, (*bourses,*) more expense of every sort.

In the hope that the few great primary Normal Schools we already possess will soon be succeeded by others, I beg your attention to the following maxims, deduced from general experience, and from all the data I have accumulated here.

I. To begin by giving instructions rather than rules; to confine yourself in these instructions to the establishing of a few essential points, and to leave the rest to the departmental committee. To discuss and decide this small number of points in the royal council; not to multiply them, but inflexibly to enforce their execution. The fewer they are, the more easy will this execution be, and the more susceptible will they be of application to all the Normal Schools of France; so that there would be a common groundwork for all; a unity, which, passing from the Normal Schools into the whole body of popular education, would have a beneficial influence in strengthening the national unity. At the same time, this unity would not be prejudicial to local diversities; for the departmental committee would be desired to apply your general instructions according to the peculiar manners or usages of the department. From the combination of the uniformity of these instructions, with the diversity of arrangements which the prudence and intelligence of the committee, and the experience of each year, will recommend, a set of regulations for each Normal School will gradually arise, more or less definitive, and therefore fit to be made public. The plan of study of the great Normal School at Paris, for the supply of the royal and communal *colleges*, is the fruit of fifteen years' experience. This school, which was founded in 1810, had no written laws till 1815. We made important modifications in those laws at the Revolution of 1830, and it was not till then that we ventured to print them, as the result, nearly definitive, or at least likely to endure for some time, of all the experiments successively tried. Let us imitate this caution, and begin with a simple set of instructions from the minister. Rules for the studies and the discipline will gradually arise. Every year will modify them. The important thing is, to exact an accurate account of the proceedings and results of the year, drawn up by the director, and transmitted to you, together with all the necessary documents, by the departmental committee and the prefect, who will subjoin their own opinion. Then, and then only, you will interpose your authority, with that of the royal council, which will revise this report every year at the vacation, and pronounce on the improvements to be introduced.

II. To attach the greatest possible importance to the choice of a director. It is a principle generally established in Prussia, that the goodness of a Normal School is in exact proportion to the goodness of the director; just as the primary school is what its master is. What constitutes a Normal School is not a fine building; on the contrary, it is not amiss that it should not be over commodious or splendid. It is not even the excellence of the regulations, which, without a faithful and intelligent execution of them, are only a useless bit of paper. A Normal School is what its director is. He is the life and soul of it. If he is a man of ability, he will turn the poorest and humblest elements to account; if he is incapable, the best and most prolific will remain sterile in his hands. Let us by no means

make our directors mere house-stewards. A director ought to be at the head of the most important branches of instruction, and to set an example to all the other masters. He must have long fulfilled the duties of a master; first, in different classes of a Normal course of education, so that he may have a general knowledge of the whole system; secondly, in *several* Normal Schools, so that he may have experience of difficulties of various kinds; lastly, he must not be placed at the head of a Normal School of the highest class, till he has been director of several of an inferior class, so as to graduate promotion according to merit, and thus keep up an honorable emulation.

III. An excellent practice in Germany is, to place the candidates, immediately on their leaving the Normal School, as assistant masters in schools which admit of two. The young men thus go through at least a year of apprenticeship,—a very useful novitiate: they gain age and experience, and their final appointment depends on their conduct as assistant masters. I regard every gradation as extremely useful, and I think a little graduated scale of powers and duties might be advantageously introduced into primary instruction.

1st. Pupil of a Normal School admitted after competition, holding a more or less high rank in the examination list at the end of each year, and quitting the school with such or such a number. 2d. Same pupil promoted to the situation of assistant master. 3d. Schoolmaster successively in different schools rising in salary and in importance. 4th. After distinguished services, master in a primary Normal School. 5th. Lastly, director of a school of that class, with the prospect of gradually rising to be director of a numerous and wealthy Normal School, which would be a post equal to that of professor of a royal *college*. The human soul lives in the future. It is ambitious, because it is infinite. Let us then open to it a progressive career, even in the humblest occupations.

IV. We can not be too deeply impressed with this truth—that paid instruction is better than gratuitous instruction. The entire sum paid for board at a Normal School must be extremely moderate, for the young men of the poorest classes to be able to pay it. We must give only quarter or half exhibitions, (*bourses*,) reserving two or three whole ones for the two or three young men, out of the fifteen admitted annually, who stand first on the list; and even this should not be continued to them the second year, unless their conduct had been irreproachable and their application unremitting.

On the same principle as that laid down above, the elementary school annexed to the Normal School ought not to be entirely gratuitous; it ought to have no other masters than the forwardest pupils of the Normal School, acting under the direction of their masters. The profits of the elementary school for practice would go to diminish the total cost of the Normal School. As for the middle school for practice, it would be contrary to the principle of all middle schools to have it gratuitous.

V. Divide the studies of all Normal Schools into two parts: during the first, the pupils should be considered simply as students, whose acquirements are to be confirmed, extended, and methodized: during the second, as masters, who are to be theoretically and practically taught the art of teaching. If the Normal course only lasts a year, this part of it ought to occupy at least six months; if it lasts two years, it ought to occupy a year; if three years, it would still occupy only a year. The students in this last year would give lessons in the elementary and middle schools annexed to the Normal School.

VI. The examination at quitting ought to be more rigid than that at entering the school. The important thing is to have young men of good capacity, even if they know little; for they will learn rapidly; while some, who might not be deficient in a certain quantity of acquired know-

ledge, but were dull or wrong-headed, could never be made good schoolmasters. No latitude whatever must be left to the Commission of Examination at departure. Here, intelligence must show itself in positive attainments, since opportunity to acquire them has been given. Nothing but negligence can have stood in their way, and that negligence would be the greatest of all faults. This latter examination, therefore, must be directed to ascertain the acquired, and not the natural fitness. But in the examination on entering, I wish that the Commission should more particularly inquire into the talents and natural bent, and, above all, into the moral character and disposition. A little discretionary power ought to be confided to it. This applies more especially to those Normal Schools, the course of which lasts two or three years. Three years of study will not give intelligence; but they will give all the necessary attainments in abundance.

VII. It is my earnest desire, that conferences* should be formed among the schoolmasters of each canton. I wish it, but have but little hope of it, at least at first. Such conferences suppose both too great a love for their profession, and too great a familiarity with the spirit of association. A thing much more easy to accomplish is, that during the vacations of the primary schools, a certain number of masters should repair to the Normal School of the department to perfect themselves in this or that particular branch, and to receive lessons appropriate to their wants, as is the case in Prussia. This time would be very usefully, and even very agreeably employed; for the young masters would be brought into contact with their old instructors and companions, and would have an opportunity of renewing and cementing old friendships. Here would be an interesting prospect for them every year. For such an object, we must not grudge a little expense for their journey and their residence. I should therefore wish that the vacations of the primary schools, which must be regulated by certain agricultural labors, should always precede those of the primary Normal Schools, in order that the masters of the former might be able to take advantage of the lessons in the latter, and might be present at the parting examinations of the third year, which would be an excellent exercise for the young acting masters.

I am convinced of the utility of having an inspector of primary schools for each department, who would spend the greater part of the year in going from school to school, in stirring up the zeal of the masters, in giving a right direction to that of the communal committees, and in keeping up a general and very beneficial harmony among the *maires* and the *cures*. It is unnecessary for me to say, that this inspector ought always to be some old master of a Normal School, selected for his talents, and still more for his tried character. But if this institution, which is universal in Germany, were not popular among us, nearly the same results might be obtained by authorizing the director, or in default of him, some masters of the Normal School, to visit a certain number of the schools of the department every year, during the vacation of their own school, and to do what would be done by the inspector above named. They would find great facilities from their old habits of intercourse and friendship with most of the masters, over whom they would exercise almost a paternal influence. On the other hand, they would gain by these visits, and would acquire a continually increasing experience, which would turn to the advantage of the Normal Schools. You have seen that in Prussia, besides the visits of the circle-inspectors, the directors of Normal Schools make visitations of this kind, for which they receive some very slender remuneration; for these little journeys are sources of pleasure to them, as well as of utility to the public.

* See notes to Professor Stowe's Essay, page 239.

VIII. Let solidity, rather than extent, be aimed at, in the course of instruction. The young masters must know a few things fundamentally, rather than many things superficially. Vague and superficial attainments must be avoided at any rate. The steady continuous labor which must be gone through to know anything whatsoever thoroughly, is an admirable discipline for the mind. Besides, nothing is so prolific as one thing well known; it is an excellent starting point for a thousand others. The final examinations must be mainly directed to the elements,—they must probe to the bottom, they must keep solidity always in view.

IX. Avoid ambitious methods and exclusive systems: attend, above all, to results, that is to say, to solid acquirements; and, with a view to them, consult experience. Clear explanations on every subject, connectedness and continuity in the lessons, with an ardent love for the business of teaching, are worth all the general rules and methods in the world.

X. A branch of study common to all schools ought to be the French tongue; the just pronunciation of words, and the purity and correctness of language. By this means the national language would insensibly supersede the rude unintelligible dialects and provincialisms. In the Normal Schools where German is still the language of the people, German and French must both be taught, in order not to offend against local attachments, and at the same time to implant the spirit of nationality.

XI. Without neglecting physical science, and the knowledge applicable to the arts of life, we must make moral science, which is of far higher importance, our main object. The mind and the character are what a true master ought, above all, to fashion. We must lay the foundations of moral life in the souls of our young masters, and therefore we must place religious instruction,—that is, to speak distinctly, Christian instruction,—in the first rank in the education of our Normal Schools. Leaving to the *cure*, or to the pastor of the place, the care of instilling the doctrines peculiar to each communion, we must constitute religion a special object of instruction, which must have its place in each year of the Normal course; so that at the end of the entire course, the young masters, without being theologians, may have a clear and precise knowledge of the history, doctrines, and, above all, the moral precepts of Christianity. Without this, the pupils, when they become masters, would be incapable of giving any other religious instruction than the mechanical repetition of the catechism, which would be quite insufficient. I would particularly urge this point, which is the most important and the most delicate of all. Before we can decide on what should constitute a true primary Normal School, we must determine what ought to be the character of a simple elementary school, that is, a humble village school. The popular schools of a nation ought to be imbued with the religious spirit of that nation. Now without going into the question of diversities of doctrine, is Christianity, or is it not, the religion of the people of France? It can not be denied that it is. I ask then, is it our object to respect the religion of the people, or to destroy it? If we mean to set about destroying it, then, I allow, we ought by no means to have it taught in the people's schools. But if the object we propose to ourselves is totally different, we must teach our children that religion which civilized our fathers; that religion whose liberal spirit prepared, and can alone sustain, all the great institutions of modern times. We must also permit the clergy to fulfil their first duty,—the superintendence of religious instruction. But in order to stand the test of this superintendence with honor, the schoolmaster must be enabled to give adequate religious instruction; otherwise parents, in order to be sure that their children receive a good religious education, will require us to appoint ecclesiastics as schoolmasters, which, though assuredly better than having irreligious schoolmasters, would be liable to very serious objections of various kinds. The less we desire our schools to be ecclesiastical, the

more ought they to be Christian. It necessarily follows, that there must be a course of special religious instruction in our Normal Schools. Religion is, in my eyes, the best, perhaps the only, basis of popular education. I know something of Europe, and never have I seen good schools where the spirit of Christian charity was wanting. Primary instruction flourishes in three countries, Holland, Scotland, and Germany; in all it is profoundly religious. It is said to be so in America. The little popular instruction I ever found in Italy came from the priests. In France, with few exceptions, our best schools for the poor are those of the *Freres de la Doctrine Chretienne.* (Brothers of the Christian Doctrine.) These are facts which it is necessary to be incessantly repeating to certain persons. Let them go into the schools of the poor,—let them learn what patience, what resignation, are required to induce a man to persevere in so toilsome an employment. Have better nurses ever been found than those benevolent nuns who bestow on poverty all those attentions we pay to wealth? There are things in human society which can neither be conceived nor accomplished without virtue,—that is to say, when speaking of the mass, without religion. The schools for the middle classes may be an object of speculation; but the country schools, the miserable little schools in the south, in the west, in Britanny, in the mountains of Auvergne, and, without going so far, the lowest schools of our great cities, of Paris itself, will never hold out any adequate inducement to persons seeking a remunerating occupation. There will doubtless be some philosophers inspired with the ardent philanthropy of Saint Vincent de Paule, without his religious enthusiasm, who would devote themselves to this austere vocation; but the question is not to have here and there a master. We have more than forty thousand schools to serve, and it were wise to call religion to the aid of our insufficient means, were it but for the alleviation of the pecuniary burdens of the nation. Either you must lavish the treasures of the state, and the revenues of the *communes*, in order to give high salaries, and even pensions, to that new order of tradesmen called schoolmasters; or you must not imagine you can do without Christian charity, and that spirit of poverty, humility, courageous resignation, and modest dignity, which Christianity, rightly understood and wisely taught, can alone give to the teachers of the people. The more I think of all this, the more I look at the schools in this country, the more I talk with the directors of Normal Schools and councilors of the ministry, the more I am strengthened in the conviction that we must make any efforts or any sacrifices to come to a good understanding with the clergy on the subject of popular education, and to constitute religion a special and very carefully-taught branch of instruction in our primary Normal Schools.

I am not ignorant that this advice will grate on the ears of many persons, and that I shall be thought extremely devout at Paris. Yet it is not from Rome, but from Berlin, that I address you. The man who holds this language to you is a philosopher, formerly disliked, and even persecuted, by the priesthood; but this philosopher has a mind too little affected by the recollection of his own insults, and is too well acquainted with human nature and with history, not to regard religion as an indestructible power: genuine Christianity, as a means of civilization for the people, and a necessary support for those on whom society imposes irksome and humble duties, without the slightest prospect of fortune, without the least gratification of self-love.

I am now arrived at the termination of this long report. May it be of use to you in the important work which now engages your attention! My illustrious colleague, M. Cuvier, has already exhibited to France the organization of primary instruction in Holland. The experience of Germany, and particularly of Prussia, ought not to be lost upon us. National rivalries or antipathies would here be completely out of place. The true

greatness of a people does not consist in borrowing nothing from others, but in borrowing from all whatever is good, and in perfecting whatever it appropriates.

I am as great an enemy as any one to artificial imitations; but it is mere pusillanimity to reject a thing for no other reason than that it has been thought good by others. With the promptitude and justness of the French understanding, and the indestructible unity of our national character, we may assimilate all that is good in other countries without fear of ceasing to be ourselves. Placed in the center of Europe, possessing every variety of climate, bordering on all civilized nations, and holding up perpetual intercourse with them, France is essentially cosmopolitan; and indeed this is the main source of her great influence. Besides, civilized Europe now forms but one great family. We constantly imitate England in all that concerns outward life, the mechanical arts, and physical refinements; why, then, should we blush to borrow something from kind, honest, pious, learned Germany, in what regards inward life and the nurture of the soul?

For my own part, I avow my high esteem and peculiar affection for the German people; and I am happy that my mission proved to them that the revolution of July,—that revolution, as necessary and as just as the legitimate right of self-defense; that revolution, sprung from the unanimous resistance of a great people to a capricious aggression, an open violation, not of hypothetical rights, but of liberties secured by law,—is not, as its enemies pretend, a return to the impiety, the licentiousness and the corruption of a fatal period; but, on the contrary, the signal for a general improvement in opinion and in morals; since one of the first acts of the new government has been the holy enterprise of the amelioration of public education, of which the instruction of the people is the basis."

With this preparation,—a good beginning already made in several departments, and the long and successful experience of Prussia and other German states before him,—a regulation was framed by M. Guizot, and sanctioned by the Council of Public Instruction, by which, in connection with the law of 1833, a system of Normal Schools has been established and is fast regenerating the elementary instruction in France. The following is an outline of the system:

Each department is obliged, either alone or in conjunction with other neighboring departments, to support one Normal School for the education of its schoolmasters.

The expense of this establishment for building, apparatus, and instruction, is borne mainly by the department, whilst the direction of the education given in it is vested in the Minister of Public Instruction, who is responsible to the Chambers, of both of which he is an ex officio member, for the right exercise of his power.

The immediate management of Normal Schools and of the model schools annexed is committed to a Director who is appointed by the Minister, on the presentation of the prefect of the department, and the rector of the academy. These directors are paid wholly or partially from the public funds set apart by the department for public instruction. If the department refuses or neglects to provide sufficient funds, the government enforces the collection of the necessary tax; if the department is overburdened, the government contributes its aid.

To meet the expense of board, the pupils are assisted by gratuities, or bursaries, which the communes, departments, the university, the state, and even individuals, have established for this purpose. These *burses* are usually granted in halves or quarters, the rest of the expense being

borne by the pupils. Of 1944 pupil-teachers in 1834, 1308 were bursars of the departments, 118 of the communes, 245 of the state, and 273 were maintained at their own expense.

Every candidate for admission to these institutions, and to the enjoyment of a *bourse*, or any part of one, must bind himself to follow the profession of a parish schoolmaster for ten years at least after quitting the institution; and to reimburse it for the whole expense of his maintenance, if he fail to fulfill his decennial engagement. He must have completed his sixteenth year; and besides the ordinary elementary acquirements, must produce evidence both of good previous character, and of general intelligence and aptitude to learn. Most of the bursaries are adjudged upon a comparative trial among competitors, who are likely to become every year more numerous: and the examination for admission is so well arranged and conducted, that it tends to raise higher and higher the standard of previous acquirement.

The course of instruction and training to which the youth is thus introduced, occupies two years of eleven months each, *i. e.* from the first of October to the first of the ensuing September, and embraces the following objects:—

1st. Moral and religious instruction. The latter, in as far as it is distinct from the former, is given by the clergyman of the particular faith which the pupil happens to profess.

2d. Reading, with the grammar of their own language.

3d. Arithmetic, including an intimate and practical acquaintance with the legal system of weights and measures. This knowledge is made to hold so prominent a part in the program of instruction, as affording the best means of introducing that admirable system into the habits of the French people, among whom, from ignorance and prejudice, it is still far from being generally adopted.

4th: Linear drawing, and construction of diagrams, land-measuring, and other applications of practical geometry.

5th. Elements of physical science, with a special view to the purposes of ordinary life.

6th. Music, taught by the eye as well as by the ear.

7th. Gymnastics.

8th. The elements of general geography and history, and the particular geography and history of France.

9th. The pupils are instructed, and, wherever the locality admits, exercised also, in the rearing of esculent vegetables, and in the pruning and grafting of trees.

10th. They are accustomed to the drawing out of the simpler legal forms and civil deeds.

A library for the use of the pupils is fitted up within the premises; and a sum is set apart every year for the purchase of such works as the Council of Public Instruction may judge likely to be useful to the young schoolmasters.

The course of study is, for the present, limited to two years, instead of three, which is the term ultimately contemplated as the most desirable. During the second of those years, instruction in the principles of the art of teaching is kept constantly in view; and for the last six months, in particular, the pupils are trained to the practical application of the most approved methods, by being employed as assistants in the different classes of the primary schools, which are invariably annexed to the Normal, and form part and parcel of the establishment.

The director, besides general superintendence, is charged with some important branch of the instruction; the rest is devolved on his adjuncts, or assistant masters, who reside in the establishment.

Any graduate of a Normal School can attend any of the courses of in-

struction in the Normal School of the department in which he resides, to learn new methods, or improve his previous acquirements. The departments are authorized to grant assistance to such teachers. The Normal Schools admit pupils of different religious denominations. All sectarian instruction is avoided in the general lessons, and the pupils receive this instruction at times set apart for it from clergymen of their own church. Until a pupil has obtained a certificate of his proficiency in the doctrines of his own religion, from a minister of his own church, he can not officiate as a schoolmaster. Any person who ventures to conduct a public school without having obtained from the departmental committee of examination a certificate of qualification, is liable to a fine of two hundred francs.

The Departmental Committee, or Commission of Examination, is composed of at least seven members appointed by the Minister of Public Instruction, upon the recommendation of the rector of the academy. Three members at least must be selected from among those who have already exercised, or are at the time exercising the function of public teachers, and who are most likely to unite ability and integrity. It is recommended that one of the seven be a clergyman. "To act," says the Minister, in a circular addressed to each of the twenty-six rectors,— "to act in concert with the three members belonging to the body of Public Instruction in these *Commissions d' examen*, a minister of religion will doubtless be summoned. The law has put moral and religious instruction in the foremost rank; the teacher, therefore, must give proof of his being able to communicate to the children intrusted to his care, those important ideas which are to be the rule of their lives. Doubtless every functionary of public instruction, every father of a family who shall be placed on this commission by your recommendation, as rector of the academy, will be fully able to appreciate the moral and religious attainments of the candidates; but it is, nevertheless, fit and proper, that the future teachers of youth should exhibit proof of their capacity in this respect, before persons whom their peculiar character and special mission more particularly qualify to be judges in this matter."

The most important of all the duties devolved upon these examining commissions, is that of conferring on the pupil, when he quits the institution, a *brevet de capacite*. Carelessness, partiality, or ignorance, in the discharge of it, would entirely defeat the main object of the law on primary instruction. This *brevet*, certifying the holder's fitness to be a teacher, either in the lower or higher grade of primary schools, constitutes his passport to the labors and honors of his profession. With it, and his certificate of good conduct in his pocket, he may carry his skill and industry to any market he pleases, without further let or impediment.

There are three grades of certificates of qualification for both elementary and superior primary; *tres bien*, (very good,) *bien*, (good,) and *assez-bien*, (sufficient,) which infuses a spirit of competition throughout the pupils of the Normal Schools, and the public schools generally.

The system of Normal Schools has remained substantially on this basis to the present time. Every year has extended and consolidated its influence in spite of the interested opposition of old and inefficient teachers, who find themselves less and less appreciated, and the complaint of local committees, who in many instances are disposed to take up with the first teacher who presents himself, whether qualified or not. Their number has increased from forty-three in 1833 to ninety-three in 1849, including ten Institutes belonging to the Brothers of the Christian Doctrine, and three for female teachers, under the auspices of an association of Christian Education, on a similar plan. In 1834 there were but 1,044 graduates of

Normal Schools employed in the primary schools; in 1848, this number had increased to 10,545.

The Revolution of 1848, disturbed the quiet working of the Normal Schools. The circular of M. Carnot, in March, 1848, exhorting all the schoolmasters of France to use their influence in the ensuing elections to promote the return of sincere republicans, and to combat the popular prejudice which preferred "the rich and lettered citizen, a stranger to the peasant's life, and blinded by interests at variance with the peasant's interests," "to the honest peasant endowed with natural good sense, and whose practical experience of life was better than all the book-learning in the world," caused a reaction against the schoolmasters, when the Revolution gave way to a new style of government in 1850. Teachers who had sympathized and acted in the spirit of the above circular were suspended or dismissed—and the vigorous working of the Normal schools was in various ways weakened. Under the legislation of 1833, the admission to these schools was by competitive examination. By the law of 1850, all examination at entrance was abolished; and the prefect in departmental council, admitted candidates by his own nomination, on their production of certificates of morality and good conduct. Many candidates thus admitted proved utterly incompetent, and in 1855, the minister, M. Fortoul, re-established an entrance examination, no longer competitive, and only in the elementary branches.

To award the certificate of capacity, there sits twice a year, in the chief town of every department, an examination commission of seven members, named by the departmental council; one of the members must be a primary inspector, one a minister of the same religious persuasion as the candidate. The examination is limited to the obligatory studies of the primary school. Any person aged not less than eighteen may appear as a candidate, giving a months' notice of his intention. Exercises in penmanship, dictation, and grammar, and the four rules of arithmetic, including fractions, are performed by the candidates; and if these are satisfactory, then each candidate is examined separately by the commission in reading, religious knowledge, grammar, and arithmetic. Those who pass this examination satisfactorily, may then be examined in all, or any of the optional studies which may now be introduced into the higher class of primary schools. When all is concluded, a list of the successful candidates is drawn up in the order of merit and forwarded to the rector of the Academy who issues the certificate, on which is entered special mention of the optional subjects, and of the degree of satisfaction given to the exercises. The names of those who hold certificates is then entered on the list of admissibility drawn up yearly for each department, and from which the prefect makes his nomination to vacant public schools. The last list contains notes of favorable reports by examination commissions. In 1859, there were in France 70 Normal schools for schoolmasters, with 2,750 students, and 30 institutions for schoolmistresses, besides a number of religious houses for training novices for schools under their auspices.

CONFERENCES, OR TEACHERS' ASSOCIATIONS,

AND TEACHERS' LIBRARIES.

THE suggestion of M. Cousin in his Report* as to the utility of conferences of teachers, was not acted upon by the Council of Public Instruction until 1837. In February of that year, a law was presented by the Minister of this department and passed by the Chambers on this subject. The substance of this law is presented in the following remarks by M. Willm, in his valuable treatise on the Education of the People.

"This law treats, in the first place, of the object of conferences; and then, of their epochs and government. The first article authorizes 'the teachers of one or several districts to assemble, with the sanction of the local authorities, and, under the close inspection of the committee of the department, to *confer amongst themselves* on the different subjects of their teaching—on the ways and methods they employ—and on the principles which ought to be adopted in the education of children and conduct of masters. Every other subject of discussion must be excluded from these conferences.' In regard to this article, I would observe, that it would not be advantageous for teachers who thus assemble to be very numerous; and that they must avoid coming from too great a distance to the place of meeting. Neither must they be very few in number; because, in that case, there would be too little variety and animation in their labors; but, were they more than twelve or fifteen, each would not be able to take an active part in the proceedings.

The second article reminds teachers that the law has placed at the head of the subject-matters of instruction, moral and religious instruction; and that it is their duty to occupy themselves with it. From this it seems to follow, that teachers belonging to different sects must not assemble together in the same conferences. In Alsace, for example, priests or ministers are generally presidents—which is a stronger reason for teachers of different communions not assembling promiscuously together.

The third article says, that the superior committees will point out to the different assemblies the subjects on which the attention of the teachers ought more especially to be fixed. These committees hitherto have, unfortunately, occupied themselves very little with such conferences; some even have opposed their formation, or given them an organization very different from that recommended by the royal council. Can there be no means of remedying this omnipotence of the committees, and regulating that liberty, in such a way as not to risk anarchy?

According to the fourth article, 'each teacher may beg permission to give an account of what he has read since last meeting, to make observations on the works in connection with primary instruction recently published, to read some essay of his own on the discipline of schools, or on some one of the branches of instruction.' Each may, besides, address to the assembly a verbal communication on the art of teaching, submit to it a doubt or difficulty, which in his daily practice he may have met.

The eighth article says that the president of the conferences must always be appointed by the rector of the academy. The president ought, wherever possible, to be selected from such as are not members of the association; he should be some friend and connoisseur of popular education, without being teacher; he will thus direct the debates and labors of the conference with more authority and a wider range of view; the information which he displays in the discharge

* See page 418.

of his duties will be more varied and profound; and he will be, in the midst of teachers, the interpreter of what the world expects from them.

Every thing will depend on the manner in which their labors are directed, and on the zeal with which the teachers engage in them. One of the principal results of conference ought to be, the exercising them in speaking. Speech is the instrument of the art of teaching. In the management of a school, and in all that concerns the mechanism of teaching, the teacher ought to speak little; his commands ought to be brief; and, in most cases, a word, a gesture, a look will suffice. But in teaching, properly so called, when he is engaged in expounding the first truths of morality and religion, in explaining what has been read by the pupils, in narrating to them the history of the Bible or national history, (sacred or profane history,) in telling them of the wonders of the heavens and the earth—then he must be able to speak with fluency, clearness, and precision, if not eloquently. Children, like men, are fascinated by the charms of speech. The choicest things, badly said, produce on them no impression; and —like arrows, darted by a feeble and trembling hand—glide, so to speak, over the surface of their mind, and never reach its depths.

The essays of the teachers may consist of two kinds. One class may be written on any subjects, but should be analogous to what teachers prescribe to their most advanced pupils—such as some scene of nature or of human life, a grand or useful thought, an historical fact, &c. These essays ought not to be long; and must be written with that correct simplicity, which is as far removed from the inelegancies of a vulgar style, as from the far-fetched phraseology of the Wit. These first essays—exercises in composition and thought—will also be a means of perfecting the teachers in the art of speaking. The other kind of essays, treating of some branch of the pedagogic art, may be more directly useful to them. In composing them, their memory, their own experience, rather than books, ought to be consulted; and simplicity and truth, rather than novelty and originality, ought to be aimed at. The greatest possible clearness, precision, and actual utility ought to be the distinguishing features of these essays.

In some societies of teachers, the same question is offered to the consideration of all the members,—thus creating amongst them a species of competition: but as every essay must be read and discussed during the meeting, they would be restricted, in following this mode of procedure, to the composition only of two or three a-year; or obliged to multiply, beyond measure, the number of the meetings; and in both cases the interest would be, inevitably, diminished. It is desirable, however, that at each sitting, the same subject be handled by two members. The two essays would compete with each other, and occasion a discussion; which the president would take care to manage, so that all might speak in rotation, and that no one, while speaking, take undue advantage. Every expression of praise or censure, every observation tending to shock self-esteem or modesty, ought, on all sides, to be prohibited. If, at the termination of the sitting, the majority be not sufficiently instructed, they could commission the president, or another member, to resume the discussion at the next conference.

On other occasions, to vary still farther the proceedings, the author of an essay could address it some days before the meeting, in the form of a letter, to one of his colleagues, requesting his opinion of it. The letter and reply might then be read, and their contents discussed in the ordinary manner. This procedure is preferable, in my opinion, to the practice of several societies in Germany. After the reading of an essay, a member is then enjoined to present a criticism of it at next meeting. This method is accompanied with serious inconveniences. Self-love becomes a willing co-operator. The critic endeavors, by every means, to find cause for controversy, and believes himself, in some sense, obliged to think differently from him whom he has been appointed to judge. In this manner concord and friendship, so necessary to the prosperity of the association, are, without great benefit to truth, seriously compromised.

I would add, that copies of all the essays should be deposited in the library, where every one might consult them.

I have said that each member may demand permission to make to the assembly any communication relative to the art of teaching; to submit to it a question, a doubt, an observation, which his practice may have suggested to him. Such communications add much to the interest and utility of conferences. By means of them, the experience of each becomes, in some sense, the experience

of all. Those who have been occupied many years in teaching will aid their junior fellow-laborers.

In fine, it may happen, and it happens but too often, that, in their relations with the local authorities and the parents, differences arise, to disturb the good understanding—the perfect harmony between them and the teachers. These differences should be submitted in the conferences to the appreciation of their colleagues—to the judgment of their compeers. They will thus be less subject to mistakes and anger; and, when necessary, more undaunted in repelling injustice, and in maintaining their rights.

LIBRARIES FOR THE USE OF TEACHERS IN FRANCE.

The fifteenth article of the law of February, 1837, on conferences of teachers, provides for the establishment of libraries for the use of those who attend the conferences. By means of the funds which the parishes or the county have granted for this purpose, or by means of clubbing among the teachers, a library should be formed for those who attend the conferences regularly. The books composing the library should be inserted in a catalogue, which must be verified every year. A copy of said catalogue must be sent to the Minister of Public Instruction.

M. Willm makes the following remarks on the subject:

"Such libraries may be established by teachers who do not assemble in regular conferences, or associate for such a purpose. A distinguished teacher may be conceived to address the following language to his colleagues, to induce them to establish such a society: 'Two principal objections may be made against this scheme. In the first place, how, with the scanty resources at our disposal, can we establish a library, in the smallest degree, complete; and then, amongst such a host of books, whose number augments every day, will not a proper selection be difficult—even impossible? In replying to these objections, I will, at the same time, let you know my views on the course to be pursued in the acquisition of books. These views are the results of my own experience, and of the counsels which, in former times, I was fortunate to receive.

I do not dissemble the importance of the doubts I am attempting to remove; the first, especially, seems but too well founded. How, indeed, with our trifling resources, can we hope to establish in a few years a library ever so little worthy of the name? We are ten members; each of us will put into the society's strong box, three shillings as entry money, and a shilling per month, or twelve shillings per annum: this is much for us—too much perhaps; and it is to be desired, that, at a later period, this monthly payment be reduced. We will thus have at our disposal, the first year, the sum of one hundred and fifty shillings. Of this sum, fifteen shillings must be spent in purchasing registers, pens, and paper; and, by adding ten shillings for small incidental expenses, our income will be reduced to one hundred and twenty-five shillings. We must become subscribers for two pedagogic journals, which may cost about twenty-five shillings a year. To lay the foundation of our library, about one hundred shillings remain.

To found, with a hundred shillings, a library, appears absurd—impossible. But let us forget for an instant the ambitious name of library, and simply say that we unite together for the purpose of procuring, in one year, ten times more books than each of us singly could purchase, and it will be granted that we are doing a judicious thing, and making an excellent speculation. Will it not be a sufficiently good result of our association, if, instead of one or two works, which perhaps each of us might have purchased, besides what are indispensable, we have at the end of the year from ten to twenty at our disposal? And supposing we continue at this rate for ten years; instead of from ten to twenty, would we not have from one hundred to two hundred, and perhaps more? And could not our collection, then, without too much vanity, be styled a library? Great things have often sprung from small beginnings. If you persevere, you will have the merit of bequeathing to your successors a considerable number of

books; and, after two or three generations, the teachers of our district will have for their use a valuable library. Is, then, the thought of working for the future of no estimation to the good man, and is not even that thought for us, as says Lafontaine, *a fruit which to-day we enjoy?*

But, besides the satisfaction of founding a work for which our successors will bless us, we ourselves will reap from it precious advantages. By associating, we unshackle the means of instruction. The books besides, which after deliberation and common consent we procure, will be better selected, than if each had been left to his own knowledge. And if you adopt my views of the course to be followed in the acquisition of books, if you select them according to fixed principles, agreed to beforehand, they will form, in the very first year, in spite of their fewness, a finished whole. Ten, twenty volumes selected with judgment, according to a certain plan, and which, by referring to each other, mutually complete and explain each other, are—in spite of the variety of their contents and immediate object—more valuable than three or four times as many works, excellent, perhaps, but chosen at random and inconsequently. From this, it follows, that after ten years' association, we might have at our command, not only ten times more books than we would have had, if each had been left to his own resources; but that these books, more judiciously selected, will have a relative value much greater than the same, or double the number of volumes collected at random.

An association affords still another advantage in this respect. There are works composed of several volumes, and whose price is such, that the majority of teachers are incapable of procuring them at their own expense. United, we can acquire, if necessary, even very expensive works, and some of these publications may be indispensable.

We may, besides, entertain the hope that other teachers will soon join us. I cherish another hope; I hope, if we persevere, that the communities of our district, that the higher committee of our parish and the academy, will come to our aid. As we think not of ourselves alone whilst we are endeavoring to enlarge the limits of our instruction, but of our *schools* and of the *future*, we can, without a blush, invoke the assistance of all who are interested in popular education—of the citizens who discover in it a means of public felicity—and of the authorities intrusted with its direction. Works, we do not doubt, will pour in from different sources, and, if we seriously wish it, we will soon have at our disposal a stock of books, sufficiently respectable to constitute the nucleus of a DISTRICT-SCHOOL LIBRARY.

I come to the second objection—the difficulty of making a suitable selection among so many books. This difficulty is serious; but in proportion to the scantiness of our means, we are less liable to be misled. This consideration, far from discouraging us, ought only to impress still more deeply the principles which ought to guide our selection.

The number of works on all subjects, has, for a century especially, prodigiously increased. The science of education, for a long time neglected, and treated by some distinguished writers only at distant intervals, reckons, in our days, its books by hundreds—if we comprehend those addressed especially to childhood and youth. But we must not be frightened by this multitude; this riches, in the main, is but apparent. Many of those works whose titles swell the catalogues of the booksellers, are old and obsolete; many others are but imitations and of little value. Good writers of every kind are not numerous; and even among the good, a selection can be made. The essential point is to know how to select well. As to old books, we will trust to their reputation, which seldom misleads; and as to new books, we will consult enlightened men.

Of the works recognized as good, we will always select the best and the most complete. To read *much* is not the principal point, but to read *well;* and to read often the *best* productions. The fruits which may be reaped from reading, depend as much upon the manner of reading, as upon the excellence of the books read.

Our library will be composed of three kinds of works. In the first rank, we shall place such as treat of the art of education; of teaching in general; of primary instruction in particular. It will not be necessary to secure a great number of books of this class; a few solid and complete treatises, which epitomise the science, will suffice for the commencement. The most essential precepts and the rules universally approved, are found in all good productions of

any length. To good treatises, however, to encyclopedic manuals, which exhibit pedagogy as a whole, and which, faithful to the precept, *prove all things and cleave to what is good*—unite what even the different methods possess of most practical and reasonable—we will add, later works upon the most remarkable special methods. Still later, in a few years, we may be able to admit into our collection a certain number of works already old, which, like Rousseau's *Emile*, have formed an epoch in the history of the art of education; then, to keep pace with the progress of the science, we only have to procure, at distant intervals, some good new treatise.

The second series of works of our future library, should consist of such as expound either the whole or some branch of primary instruction; of manuals of religion and morality; of arithmetic, geography, and general or national history; natural history, physics, hygiane, agriculture, and technology; written expressly for teachers, children, and the people.

Finally, the richest portion of our library might be composed of instructive and rare works, which, while adding to our knowledge, will afford useful relaxation, and the means of infusing into our lessons a wholesome variety; of exciting and sustaining the attention of our pupils, and of throwing an interest around our teaching.

I rank in this third class of books, *first*, extracts or selections from travels in the different quarters of the globe. They will supply the place of the original narratives, too dear, and which include, besides, generally many very useless details, or things already known. There is scarcely any kind of reading more interesting than the history of travels in distant countries, and which furnishes the most useful materials for the instruction of youth.

Secondly, historical works, particularly natural history, selecting, in preference, such as have been composed for the young of schools. We might extract from them, to narrate to our pupils, those traits of magnanimity and devotedness to one's country and humanity, which constitute the beauty and honor of history.

Thirdly, I would place in our library a few religious and national poets; good anthologies; selections and collections of pieces in prose and verse; a few books more especially written for the instruction and amusement of childhood and youth, and which can be read to and by our pupils.

Fourthly, popular works which, addressed directly to the people, in towns and in the country, strive to snatch them from the misery of ignorance, to render them better and happier; and which adapt to their capacity, morality, counsels of prudence, and the most interesting and useful results of science in general. Till each parish possess its own library, we shall form, as it were, an intermediate stage, a connecting link, between science and the people. To explain these books, and to facilitate the comprehension of them, we must ourselves be thoroughly acquainted with them. We will find in them, besides, an abundant source of instruction for ourselves and for our pupils.

In short, my dear Colleagues, our library ought to consist of a small number of works on methods; manuals of all the branches of primary instruction and of the education of the people; and many instructive and popular works. Thus, all works of pure amusement, and such as are not addressed directly either to schools or youth, to the people or to the teachers of the people, must be excluded. By confining ourselves within these limits, our selection will not be difficult; especially if we be guided by men well versed in such matters. Let us begin the work; let us persevere in the prosecution of it; and soon we shall have to congratulate ourselves on having undertaken it, and on having founded, at the expense of a few light sacrifices, an institution of incontestible utility.'"

MEANS OF IMPROVING

THE

PECUNIARY CONDITION OF TEACHERS IN FRANCE.

The provisions of the French law respecting Teachers' Conferences and Libraries, and the remarks of M. Willm, are intended to show how teachers, by association, may add to the acquirements of the Normal School, keep pace with new methods and discoveries, clear up the difficulties and supply the wants met with in their particular position, and escape from that meaningless routine of practices, and dull uniformity of character, to which their profession pursued alone exposes them. But the French law aims, although imperfectly, to ameliorate the teacher's condition, and the condition of his family, by guarding against present and future want. On these points M. Willm makes many judicious suggestions from which American teachers may profit.

"If poverty be always an evil, it is especially so to the teacher; because it prevents him from performing efficiently his duty, and enjoying due distinction. His functions will be doubly painful, if the cares of the morrow deprive him of the energy sufficient to accomplish his daily task. I demand not wealth for the teacher: I ask not that he be rich, but beyond the reach of indigence; that he be able to live in honest ease, without being obliged to devote himself to labors foreign to his profession; that he have the power to continue his studies, to support a family, and to enjoy an honorable repose in his old age—if Heaven accord him length of days—or die undisturbed as to the future lot of his children, if carried away from them in the midst of his career.

The condition of the teacher is at present widely different from this. The law of 1833 has undoubtedly bettered his lot;—and it were ungrateful to deny it. It may be said, indeed, that in general, schoolmasters are better paid in France than in most other countries. In Germany there are a considerable number who do not gain the minimum salary of four hundred francs; and even in Prussia, the average—every thing included—is, for a town-teacher, eight hundred francs; for a country teacher, about three hundred francs: and let us remark that, in Prussia, living is much dearer than in France. It is not necessary to reckon up in detail our every-day expenses, to be convinced that, with such a paltry income, it is wholly impossible to maintain housekeeping on the most economical principle; and that a family of industrious laborers has much greater chance of prospering than that of a teacher.

In France, I repeat, teachers are, in general, much better paid. In towns, it is seldom that they do not gain from one thousand to twelve hundred francs; and in several localities their income exceeds this. In the country, there are few whose salary is under five hundred francs; and many gain a great deal more. But five hundred francs and one thousand francs are but poor remuneration for three hundred and sixty-five days' labor; for to gain even that sum, the teacher is most frequently obliged to add to the functions of schoolmaster, those of beadle, organist, and chanter; such a sum is too inconsiderable to support a family; for we always take for granted that the teacher is married, and has a family: and that so he sets a good example, and is rendered more qualified to train men and citizens.

The condition of teachers must therefore be improved; it must be rendered more pleasant, and, at the same time, more respected, not only with a regard to their interests, but especially for the sake of schools, of the people, and of the state itself.

1. Teachers may themselves do much to ameliorate their lot, and raise their condition. They must remember the old proverb—*help yourself, and Heaven will help you.* M. Schlez, a much esteemed German teacher, thinks that a teacher should always follow some trade, avoiding scrupulously, however, every degrading calling, or which might bring him into competition with the inhabitants of the district. He proposes, as compatible with the functions of the teacher of the people, gardening; the cultivation and grafting of trees; the rearing of bees and silk-worms; musical instrument-making; clock-making; bookbinding; bandbox-making; moulding; painting; the art of turning; the construction of barometers and thermometers; the duties of copyist and book-keeper—and, finally, private lessons. But many of these occupations would require too long an apprenticeship, or engage too much time, to render them lucrative; or they would need an outlay beyond the ordinary means of a teacher. Country teachers might find a valuable resource, as well as a noble recreation, in the cultivation of a garden of limited extent, which all districts ought to have at their disposal; and the ground of which, if it could not be purchased, they might almost always find opportunity to rent.

The art of gardening, which includes the grafting of trees, the cultivation of useful plants and of flowers, appears the most compatible with the occupation of teachers; between them are close analogies. That art can be learned at small expense, and in a short time. The teacher who, from his being well paid, needs not devote himself to pursuits foreign to his profession, might follow it simply for amusement; others would find it a means of improving their condition: and the employment would neither be degrading nor fatiguing. I have seen one of these gardens cultivated by a teacher, whose school was a garden blessed to him by Heaven. One division of it furnished kitchen vegetables; another was planted with fruit-trees of the best sorts; a third, was a nursery exceedingly varied, and flowers abounded in every quarter. Often he led to it his select pupils; his garden was at once a source of pleasure and profit to himself, and of instruction to his school. This example ought to be generally imitated. To the cultivation of a garden and orchard, country teachers might join, according to circumstances, the rearing of bees or silk-worms. During winter, study and instruction ought exclusively to occupy them, and nothing should prevent their keeping an evening-school for adults, or for young people from fifteen to twenty years of age, as is done in several districts of Alsace. This evening-school, which might be of great utility, would supplement a little income; and it depends but on the interest they had in it, to induce a great number of their old pupils to take an active part in this additional instruction. Bandbox-making and book-binding, would likewise be suitable occupations, but not very lucrative.

Shall I inform the country teachers that they have in their own power another means of being in less uneasy circumstances, and that this means is rigid economy, a retired and unassuming life? I have scarcely courage to do so, for the majority are indeed forced to be economical. There is, however, a considerable number who frequent inns and coffee-shops; and who are too much engaged in public amusements, little compatible with the moral authority which they ought to exercise, or with the state of their fortune. Without preventing them, on certain occasions, from mingling with public life, and sharing the honest pleasures of society, they ought to be counseled not to be prodigal of themselves, nor to court these occasions; but carefully to avoid whatever may tend to compromise their dignity, or lead them into useless expense.

In several Normal Schools, the pupil-masters are taught to draw up *civil acts*, as a great many of them will one day become registrars at the mayoralty. Such functions very well correspond with those of teachers in small parishes where there are few acts to write, provided the registrar-teacher can abstain from mixing himself up with the *municipal passions*, often very violent in the smallest villages. Some, likewise, compete with the notary, and for a trifling salary, draw out contracts in private.

Land-surveying affords another resource; a very inconsiderable number can be employed in it, and little dependence should be placed on it.

In short, besides a life sober and modest, the cultivation of trees, the rearing of bees and silkworms, a little rural and domestic economy, private lessons, the functions of registrar, land-surveying, and, perhaps, book-binding and bandbox-making, are the methods by which teachers may ameliorate their condition,

without neglecting their duties, or derogating from their dignity. There is, however, still another resource which might be valuable: it is that which teachers may find in the assistance of their partners: if they knew well how to choose—if they chose not such as are rich, but such as are economical, well-educated, good, and intelligent. I know some who are not only good housekeepers, but who render great services to the community by the examples and lessons they give to the young girls of the district.

Teachers' wives, in the absence of sisters or governesses, properly so called, ought to be able to undertake the teaching of needle-work and other similar branches, as well as the management of infant-schools, throughout all the rural districts. Their rank, as mothers, far from being an obstacle, would adapt them still better for the discharge of such functions; and when temporarily prevented from accomplishing them themselves, they would easily find among the young girls they had trained, assistants to supply their place.

2. Communes (corresponding to our parishes, towns and districts) may place at the disposal of the teacher a portion of ground capable for farming, an orchard and garden. To the school-house, which the 12th article of the organic law obliges every parish to provide for the teacher, ought always to be annexed, in the country, a piece of ground for a garden. If it were impossible to purchase such a piece of ground, the parish might secure it on a long lease, or supply its place by an annual indemnification of fifty francs to the teacher. In fine, the parishes that possess the means, should be obliged to supplement the fixed legal salary, in proportion to the increase of their ordinary revenue. Several general councils have voted funds to indemnify teachers who attend *conferences*, and to aid in the maintenance of libraries established by them. This example ought to be generally imitated. Instead of limiting themselves to making up the exact legal salary of teachers, when the revenues of the parishes are deficient, the counties ought to aid such as can not raise the salary of their schoolmasters to the minimum of five hundred francs, comprising every kind of emolument. The majority of the general councils vote funds for improving the breed of horses and cattle; why could they not establish a few premiums for the amelioration of mankind? Why could they not grant, every year, a few prizes to the best teachers of each district—those whom the reports of the inspectors and the committees recognized as the best? In fine, the parishes—and, they failing, the counties and the state—ought always to provide a moderate retiring provision for deserving teachers; so that they may not dread retiring, when age unfits them for the maintenance of discipline. The higher school authorities,—the departmental and county councils,—could add to the premium now required by law.

3. The nation alone can make thorough provision for the necessary amelioration of teachers, who are now public functionaries, and intrusted with the education of the people. That they may discharge their functions with courage and devotedness, it is necessary, after they have been properly trained in the Normal Schools, and their morality and capacity well attested, to make them a suitable appointment, so as to enable them to devote themselves exclusively to their school-duties; to live honorably, though unostentatiously, and to continue improving themselves. It is necessary, besides, to afford them a pension when old age renders retreat imperative, and to remove from them all apprehensions as to the lot of their families should they die prematurely—victims of their zeal in executing their painful duties.

Let me be permitted to observe, that the law of June, 1833—that law, in other respects, so full of wisdom, which grateful posterity will always quote with respect, and from which dates truly good primary instruction in France—that law, I say, whilst declaring popular schools a public obligation, a social necessity, and raising teachers to the rank of communal and irremoveable functionaries, has not done enough to render their condition what it ought to be, nor sufficiently armed the executive for the strict execution of the law.

The twelfth article says, that every parish teacher shall be provided with a locality, properly situated for a habitation and the reception of pupils. I have mentioned, elsewhere, how this order of the law has, in many places, been executed; and in what sense many parishes understand the word *properly*.

The same article guarantees the primary teacher a fixed salary of at least two hundred francs: it is now pretty generally acknowledged, that the minimum should be raised to three hundred francs: it results from calculations made by

the Minister of Public Instruction in his last report, that to raise the minimum to three hundred francs, it would be requisite to add a million to the budget, and that the said sum would fall to the account of the department. I will not ask what is a million amid a budget of a thousand millions, and what is a million portioned out among the eighty-six counties; I know that the resources of France are great: her wants are likewise immense. But I will say, that the country should consider no sacrifice too costly to secure a service so important as that of popular instruction; and that it ought not, in this respect, to be behind any civilized nation.

The monthly fee, which, according to the fourteenth article, ought to be collected by tax-gatherers in the ordinary form, is the principal source of the teachers' income; but the law has left the fixing of it too much to the arbitrary inclination of the municipal councils. An additional paragraph inserted, upon the proposal of M. Antoine Passy, in the third article of the law of receipts, 1841, submits this fee and the number of gratuitous pupils to the approval of the prefects, who, on the advice of the district committees, may fix a minimum rate for the monthly fee, and a maximum one for the number of gratuitous admissions. The faithful execution of this legislative enactment would be a great benefit: let me hope, that in the next report of the minister, the lot of teachers shall appear every where ameliorated by its means. We must not believe, however, that it will be so productive as to exempt the legislature from raising the minimum fixed salary to three hundred francs.

The law has, at the same time, wished to guarantee the future of teachers. Two methods presented themselves for this object. To deduct from their fixed salary five per cent., as is done with the functionaries of the University, and thus to acquire for them a right to a retiring pension, or to establish simply a savings' or provident-box, in every respect like the ordinary ones; with this difference, that the deposits should be obligatory, and that they could not be withdrawn but at the retiring or death of the depositors. The first of these two systems has the disadvantage—in case of the more or less premature death of a teacher —of depriving his family of the amount deducted from his salary in favor of the surviving teachers. The second system, on the contrary, that of savings'-boxes, makes them run no chance of risk; having reached the end of their career, the product of their economy is restored either to themselves when they retire, or to their families, should they die in the discharge of their duties.

It is this last system which the law has sanctioned by establishing savings'-boxes, formed by the annual deduction of a twentieth from the fixed salary of each parish teacher. This system has been found fault with, for producing but a poor resource for a deserving teacher and his family. Indeed, the deduction of a twentieth from a fixed salary of two hundred francs will produce, of capital and interest, at the end of ten years, only a reserve of one hundred and twenty francs, five centines; at the end of fifteen years, only a reserve of two hundred francs, fifteen centines; at the end of twenty years, it will produce about three hundred francs; at the end of twenty-five years, a little more than four hundred francs; at the end of thirty years, about five hundred francs; and forty years' service are necessary to save, in this manner, a thousand francs. The same deduction made upon a fixed salary of three hundred francs will produce one hundred and eighty francs, at the end of ten years; four hundred and fifty francs, at the end of twenty years; eight hundred and forty francs, at the end of thirty years; and about one thousand four hundred and twenty-five francs, after forty years' service. A deduction of twenty francs per annum would amount, in ten years, to two hundred and forty francs; in twenty years, to about six hundred francs; in thirty years, to about one thousand one hundred and twenty francs; at the end of forty years, one thousand nine hundred francs.

We see that, in supposing each teacher to deposit twenty francs a year, this system would still leave much scope for improvement; since, after twenty or forty years' hard labor, it guarantees the teacher only from fifty to one hundred francs of revenue.

To render these saving-boxes of great importance, it would be necessary, in my opinion, to make the deduction of a twentieth, not only from their *fixed* salary, but likewise from the *casual* one, from the *monthly fee;* a thing easily done, as this fee must be collected by the ordinary tax-gatherers.

A mixed system would perhaps be preferable—a system that would unite, as

much as possible, the advantage of savings'-boxes and of deductions made from the salaries, to constitute a fund for retiring pensions. For this purpose, it would be necessary to establish in each chief city, a box, which should be both for savings and deductions, to which the teachers, the districts, and the counties should contribute, and which might receive gifts and legacies. I shall leave to more skillful financiers, the task of developing this idea, and of showing how it might be executed; I limit myself to laying its foundation. Let me suppose a county composed of five hundred districts, and reckoning six hundred and fifty public teachers: this is almost the condition of the Lower Rhine. Let me suppose that this county consents to disburse per annum into the schools'-box, the sum of five thousand francs; that, on their part, the five hundred districts pay into it, annually, at an average, ten francs, which is one thousand francs—in fine, that a deduction of fifteen francs is made from the salaries of the six hundred and fifty teachers, which makes annually seven thousand seven hundred and fifty francs; let me suppose farther, that all these payments amount together to twenty thousand francs per annum, and we will have, at the end of ten years, without counting interest, or probable gifts and legacies, a sum of two hundred thousand francs; and, after twenty years, four hundred thousand francs; a capital which, placed at four per cent., would produce sixteen thousand francs of interest. This interest would be divided, according to an understood ratio, between the deserving and infirm teachers, and the widows and orphans of teachers deceased. To have a right to a retiring pension, it should be necessary to give proofs of infirmity, or of at least thirty years' service. Widows would lose their claims on remarrying; and the children would cease to receive their portion at twenty-one years of age. It should be understood that the districts, small in number, which themselves might engage to provide retiring pensions to deserving teachers, should be at liberty to do so, and be exempted from contributing to the county-box.

This box—which should, especially and essentially, be a fund for *pensions*—would be a *savings'-box* only for such teachers as have been obliged, from bad conduct, to resign their functions, or who voluntarily give them up, and without being unwell, before having served thirty years. The amount only of what they had paid in, should, without interest, be restored to them. The same should be done with such as leave for situations elsewhere; their disbursements should be transmitted to the box of the county to which they go.

Every one would gain by realizing this scheme: there would be a loss sustained only by such as abandoned their calling, or by children become majors at the death of their fathers. The enactment, again, might, according to circumstances, stipulate for some succor to the latter, and even in favor of the children of destitute teachers. But to render such a box truly productive, the concurrence of the counties and districts is indispensable. We might hope, likewise, that many friends of popular education would assist it, especially at the commencement. After twenty or twenty-five years, the box would subsist of itself, and without any other fresh contributions, save of those concerned.

In short, what is necessary to render the condition of the teachers comfortable, is, in the first place, a convenient dwelling-house, with a garden in the rural districts; then a fixed salary of at least 300 francs, with a casual salary proportioned to the number of scholars, and resulting from a monthly fee, fixed by the municipal councils, subject to the approval of his prefects, and collected by the tax-gatherers; finally, a county-box for retiring pensions, and for aid to the widows and orphans, supplied by the concurrence of the counties, the districts, and the teachers. Encouragements, premiums adjudged by the counties to the most deserving, and succor granted to the most necessitous districts, would usefully complete this system.

The medals which at our anniversaries are distributed every year can have no real value until their recipients are beyond the reach of want. Honorary distinctions add, besides, to the consideration of such as are the objects of them; and they contribute more to the interests of the body to which they belong, than to those of the men who have been decorated by them. It would, therefore, be very useful, that, from time to time, this *bullion recompense*, to which M. Guizot refers in his beautiful circular, attest to the most experienced and devoted teacher that the *government watches over their services and knows how to honor them.*

PRIMARY NORMAL SCHOOLS

OF VERSAILLES AND DIJON.

THE Primary Normal School of Versailles is for the Department of Seine and Oise. It comprises within its ample premises* several establishments for the instruction and practice of teachers. The school itself contains eighty pupils under regular instruction throughout the year, and furnishes a two months' course to adult schoolmasters. The establishments for practice begin with the infant school, and rise through the primary to the grade of primary superior. Of the elementary schools, one affords the young teachers an example of the method of mutual, and another of simultaneous instruction. The primary superior school had been recently established, at the date of my visit, in 1837. There is, besides, an evening department for the elementary instruction of adults, taught by the pupils of the Normal School, and also a school of design, which is established here rather for convenience than as properly belonging to the range of the institution.

The whole establishment is under the immediate control of a director (Mr. Le Brun), subject to the authority of a committee, and of the university, the inspectors of which make regular visits. The committee inspect the school by sub-committees once a month, visiting the recitation-rooms of the professors without giving special notice—a plan much to be preferred to that of stated visits. If a member of a committee desires questions to be put upon any particular points, he calls upon the professor to extend his examination, or asks questions himself. The director examines the classes frequently, or is present at the lessons. There are eight professors for the various courses, and two "repeaters" (répétiteurs), these latter superintending the pupils when not with the professors, and giving them assistance if required. The repeaters are responsible for the execution of the order of the day in the institution, and for the police, and one of them sleeps in each of the two dormitories. Some of the teachers in the Normal School also give instruction in the model schools, and have charge of the pupils while engaged in the practical exercises. The domestic economy is under the charge of the director, but he is allowed an assistant, who actually discharges the duty of superintendence, and who has brought this department into most excellent order.†

There are a certain number of gratuitous places, to which pupils are admitted by competition, those found best prepared at the examination for admission having the preference. Pay pupils are also received at a very moderate rate,‡ but are exactly on the same footing, in reference to the duties of the institution, with the former. Young men who wish to compete for a place, and are not sufficiently prepared, may enter as pay pupils, and thus receive instruction directly applicable to their object. The age of admission is, by rule, between sixteen and twenty-one, but the former limit is considered too early for profitable entrance. The qualifications for admission consist in a thorough knowledge of the subjects taught in the elementary schools.

The period of instruction is two years. The first year is devoted to the

* Used under a former dynasty to accommodate the hounds of Charles X.

† During the first year of the institution, the fare of each student cost fifty-nine centimes (twelve cents) per day. They had meat twice a day, except on the fasts of the Church.

‡ Five hundred francs, or about one hundred dollars, per annum.

revision of elementary studies, and the second to an extension of them, and to theoretical and practical instruction in the science and art of teaching. The subjects of revision or instruction are, reading, writing, linear drawing, geography, history, the drawing of maps, morals and religion, vocal music, arithmetic, elementary physics, terraculture, and pedagogy.

The religious instruction is given by an ecclesiastic, who is almoner to the school; it includes lessons on the doctrines and history of the church, given twice per week. Protestants are not required to attend these lessons, but receive instruction out of the institution from a minister of their own confession.

Physical education is conducted by means of exercises in gymnastics, by walks, and the practice of gardening. In summer the pupils bathe once a week. The gymnastic exercises are taught by the more expert pupils to the scholars of the model schools, and appear to have taken well among them.

The pupils study in a room common to all, and the degree of attention which they pay, and their conduct, are marked, according to a uniform scale, by the superintending "repeater," and reported daily to the director. Once every month the professor examines these classes on the studies of the past month, and reports the standing. Marks are also given for great proficiency and attention, which are reported with the standing. These marks, and those of the examination, are summed up, and when they amount to a certain number for the month, the pupil is entitled to a premium. The premiums consist of books uniformly bound, and accompanied by a certificate Report is made of these pupils to the minister of public instruction, and the record may serve them when desirous to secure a particular place. The director assembles the school to hear an account of these monthly reports, and makes such remarks as they may suggest.

Besides the more usual school implements, this institution has a library, a small collection of physical and chemical apparatus, of technological specimens, already of considerable interest, and of models of agricultural implements. There are also two gardens, one of which is laid out to serve the purposes of systematic instruction in horticulture, the other of which contains specimens of agricultural products, and a ground for gymnastic exercises. The pupils work by details of three at a time, under the direction of the gardener, in cultivating flowers, fruits, vegetables, &c. They have the use of a set of carpenters' and joiners' tools, with which they have fitted up their own library in a very creditable way.* In the second year they receive lectures on the science and art of teaching, and in turn give instruction in the schools, under the direction of the teachers. Their performances are subsequently criticised for their improvement.

The order of the day in summer is as follows:

The pupils rise at five, wash, make up their beds, and clean their dormitories, in two divisions, which alternate; meet in the study-hall at half past five for prayers, breakfast, engage in studies or recitation until one; dine and have recreation until two; study or recite until four; have exercises or recreation, sup, study, and engage in religious reading and prayers; and retire at ten, except in special cases. Before meals there is a grace said, and during meals one of the pupils reads aloud.

In distributing the time devoted to study and recitation, an hour of study is made to precede a lesson, when the latter requires specific preparation; when, on the contrary, the lesson requires after-reflection to fix its principles, or consists of a lecture, of which the notes are to be written out, the study hour follows the lesson. The branches of a mechanical nature are inter-

* A carpenter who came to attend the evening classes was found by the director so intelligent, that he advised him to prepare for the school. The young man succeeded in entering, at the annual competition, and subsequently, on leaving the school, received one of the best appointments of his year as a teacher.

spersed with the intellectual. The students of the second year are employed, in turn, in teaching, and are relieved from other duties during the hours devoted to the schools of practice.

On Sunday, after the morning service, the pupils are free to leave the walls of the institution. The same is the case on Thursday afternoon. The director has found, however, bad results from these indiscriminate leaves of absence.

The discipline of the school is mild, the age and objects of the pupils being such that the use of coercive means is seldom required. The first step is admonition by a "repeater" or professor, the next a private admonition by the director. If these means prove ineffectual, dismission follows. The director has great influence, from his personal character, and from the fact that his recommendation can secure a good place* to the pupil immediately on leaving the school. The mode of life in the institution is very simple. The pupils are neatly but roughly dressed, and perform most of the services of police for themselves. The dormitories are very neat. The bedsteads are of wrought-iron, corded at the bottom. During the night the clothes are deposited in small boxes near the beds. The extra articles of clothing are in a common room. Cleanliness of dress and person are carefully enjoined. The fare is plain, but good, and the arrangements connected with the table unexceptionable. There is an infirmary attached to the school, which is, however, but rarely used.

The schools for practice do not require special description, as their organization will be sufficiently understood from what has already been said of primary schools, and they have not been long enough in operation to acquire the improved form which, I cannot doubt, they will receive under the present able director of the Normal School.

The Primary Normal School at Dijon, for the Department of Côte d'Or, in its general organization, is the same as that at Versailles. It differs, however, in one most important particular, which involves other differences of detail. All the instruction, except of religion and music, as well as the superintendence, is under the charge of the director and a single assistant, who, by the aid of the pupils, carry on the schools of practice, as well as the courses of the Normal School. This arrangement limits the amount of instruction, and interferes very materially with the arrangement of the studies. The school is conducted, however, with an excellent spirit. An idea of the plan will be obtained from the order of the day, which also contains an outline of the course of instruction.

From five to six A. M., the pupils say their prayers, wash, &c. From six to seven the higher division has a lesson in French grammar. The lower receives a lesson in geography or history alternately. From seven to eight, the higher division has a lesson in geography or history alternately; the lower division in arithmetic. From eight to half past eight, breakfast and recreation. From half past eight until eleven, a portion of the higher division is employed in the primary schools of practice, and the others are engaged in study. From eleven until one, writing and linear drawing for both divisions. From one until two, dinner and recreation. From two until half past four, as from half past eight to eleven. Recreation until five. From five to six, instruction in instrumental or vocal music for each division alternately. From six to seven, the higher division has a lesson in geometry, or its applications; the lower division in French grammar. From seven until a quarter before eight, supper and recreation. From this time until nine, the higher division has a lesson in physical science or natural history, mechanics, agriculture, and rural economy, or book-keeping; the lower di-

* The best places, in point of emolument, are worth from fifteen to eighteen hundred francs (about $300 to $360).

vision in reading. The last quarter of an hour is occupied by both divisions in prayers, after which they retire. This order applies to all the days of the week but Thursday, when, from eight to ten, the pupils receive moral and religious instruction; from ten to eleven, instruction in the forms of simple, legal, and commercial writings; and from two to four, engaged in the review of part of the week's studies. On the afternoon of Thursday the schools of practice are not in session.

On Sunday, after the duties following their rising, the pupils are occupied in studying and revising some of the lessons of the week. From nine to ten o'clock, in religious reading, aloud. At ten they go to service in the parish chapel, attended by the director and his assistant. Receive moral and religious instruction, on their return, until dinner-time. After dinner, attend the evening service, and then take a walk. In the evening, assemble for conversation on pedagogical subjects, and for prayers.

NORMAL SCHOOL AT BORDEAUX.

The Normal School at Bordeaux is maintained by the department of the Geronde, and that of Lot and Garonne, each establishing scholarships in it for its own students. In 1859 there were fifty-one students on a course of three years, conforming to the legal programme of the primary school. The student is not allowed to pass from the obligatory to the optional studies until he has given proof of his thorough knowledge, and his ability to teach the former in the practicing school annexed. Much attention is given to method.

The teaching staff consists of a director or teacher, two lecturers, and a chaplain. The main work of instruction devolves on the director, who has just received the decoration of the Legion of Honor for his success. The students are boarded on the premises—sleep in one vast dormitory, and their dietary is regulated by a ministerial decree.

The annual charge is 400 francs. Each student pays from his own resources 100 francs for the first year. After the first year, a certain number of the best students are entitled to scholarships provided by the departments.

A good garden is attached to the establishment, and lessons in horticulture and agriculture are given and greatly enjoyed by the students.

NORMAL SCHOOL*

FOR

TEACHERS OF COLLEGES AND SECONDARY SCHOOLS,

AT PARIS.

The "Normal School," intended to furnish professors for colleges, was established in 1794, by the same convention which created the polytechnic school. The organization proposed by the law was upon a scale entirely beyond the wants to be supplied; and, notwithstanding the exertions of its eminent professors, the school had but a temporary existence, and ill success, mainly from the unprepared state of the pupils who had entered it, and to whom the kind of instruction was entirely unadapted. There were thirteen courses of lectures, and among the professors were Lagrange, Laplace, Haüy, Monge, Berthollet, Volney, Bernardin St. Pierre, Sicard, and Laharpe. The school was suppressed by a decree of April, 1795, and its pupils dispersed. After the reorganization of the university, in 1806, the expediency of reviving the normal school appears to have been felt, and it was reorganized in 1808. The number of pupils provided for in the new plan was three hundred; but from 1810 to 1826 there were never more than fifty-eight actually in attendance. According to the plan of instruction, lectures were to be attended out of doors, and interrogations and study to take place within the school, under the charge of the elder pupils. The recitations of the pupils to each other were called conferences; a name which is still preserved, being applied to the lessons given by the teachers, who are called masters of conferences. The duration of the course of instruction was limited at first to two years, but subsequently extended to three. The school was a second time suppressed, in 1822; and in 1826 an institution, termed a "preparatory school," was substituted for it, which in its turn was abolished, and the old normal school revived by a decree of the lieutenant-general of the kingdom, on the 6th of August, 1830. A report was made by M. Cousin, Secretary of the Council of Public Instruction, in October, 1830, the recommendations of which were adopted substantially. New regulations for the course of study, the general arrangements and discipline, have been gradually prepared, and the school has commenced a career of usefulness which it bids fair to prosecute with increasing success.

The chief purpose of the normal school is to give its pupils ample opportunities of preparation for the competition for places of adjuncts in the colleges (cours d'agrégation), and its arrangements are all subordinate to this object. In this competition, however, the pupils of the school meet on an equal footing, merely, with all other candidates.

The officers, in 1837, were, the director, who did not reside at the school, nor take part in the instruction; the director of studies, the resident head of the establishment; eight masters of conferences for the section of letters; six masters of conferences, and one for the drawing department, for the section of sciences; two preparers (préparateurs); a sub-director, charged with a general superintendence of the pupils, and two assistants, called superintending masters. The masters of conferences have, in general, equivalent duties to the professors in the colleges. In 1837 there were eighty pupils in the school, of whom forty-nine were supported entirely by the funds allowed by the government, and eighteen had half their expenses defrayed.

The normal school at present occupies a part of the buildings belonging

* From Bache's Education in Europe.

to the Royal College of Louis-le-Grand, and the college furnishes the food and clothing of the pupils by agreement with the school. This connection has advantages, and among them, that of enabling the pupils to have some practice in teaching; but they are more than counterbalanced by disadvantages, and the friends of the school are earnest in their endeavors to procure a separate domicile for it. The accommodations for lodging, study, instruction, and exercise, as far as the building and its site are concerned, are certainly of a most limited kind.

Admission.—The number of pupils who may be admitted is determined every year by the probable number required to fill the vacancies in secondary instruction. The admissions are made by competition, and for the most successful competitors a limited number of bursaries (bourses) are established, divisible into half bursaries, which are distributed to those who require assistance. The candidates enter their names at the academy nearest to their residence, between the fifteenth of June and of July, every year. Each candidate deposits the following certificates, viz., of the date of birth, showing that he is over seventeen and under twenty-three years of age; of having been vaccinated; of moral conduct; of having completed, or being about to complete, his studies, including philosophy, and, if he intends to become a teacher of science, a course of special mathematics and of physics; a declaration from his parent or guardian, if the candidate is a minor, that he will devote himself for ten years, from the period of admission, to public instruction. These lists are forwarded by the rectors of the several academies, with their remarks, to the council of public instruction, which returns, before the first of August, a list of those persons who may be examined for admission. This examination is made in the several academies, with a view to select the most prominent candidates, whose cases are to be ultimately decided by competition at the school in Paris. It consists of compositions upon subjects which are the same for all the academies, and of interrogations and oral explanations. For the candidates, as future instructors in letters, the written exercises are a dissertation, in French, on some points of philosophy, an essay in Latin, an essay in French, a Latin and Greek version, and Latin verses. The oral examinations turn upon the classical authors read in college, and upon the elements of philosophy, rhetoric, and history. The candidates in science have the same written exercises in philosophy and in Latin versions, and in addition, must solve one or more questions in mathematics and physics. The oral examinations are upon subjects of mathematics, physics, and philosophy, taught in the philosophy class of the colleges. All the written exercises and notes of the oral examinations are forwarded to the minister of public instruction, and submitted severally to a committee of letters and a committee of science, taken from among the masters of the normal school, the director being chairman of each committee. These committees decide whether the candidates are fit to be allowed to present themselves for examination at the school, and those who are deemed worthy, receive a notice to report themselves on or before the fifteenth of October. Previous to this competition the candidates are required to present their diploma of bachelor of letters or of sciences. The masters of the normal school are divided into two committees, one of letters and the other of science, for conducting these examinations, which are oral, and the result of which determines the admission or rejection of the candidate. On admission, the pupil makes an engagement to devote himself to public instruction for ten years.

Instruction.—The present arrangement of the courses of instruction can only be regarded as provisional, improvements being gradually introduced, as observation shows their necessity. The principle declared by the director, M. Cousin, to be that of the school in this respect, is worthy of all commendation. "When," says M. Cousin, in his Report of 1835–6,* "experi-

* Ecole Normale. Règlements, programmes, et rapports. Paris, 1837.

ence shows the necessity or utility of a measure which the fundamental regulations of the school have not provided for, it is by no means proposed at once to the royal council for adoption as an article of the regulations; authority is asked to put it to the test of practice, and it is only when found repeatedly successful that it is deemed prudent to convert it into a regulation." A close observation of the merits and defects of the system is thus made to pave the way for judicious changes.

The full course of the school, at present, occupies three years. The pupils are divided into two sections, that of letters and of science, which pursue separate courses. In the section of letters, the first year is devoted to a revision, and the second to an extension, of the higher courses of the colleges, and the third is especially employed in fitting the pupils to become professors. In fulfilling this object, however, no instruction in the science or art of teaching is given in the establishment, nor is it obligatory upon the pupils to teach, so that, as far as systematic practice goes, they derive no direct benefit from the school; it is a privilege, however, which many enjoy, to be called to give lessons in some of the royal colleges, particularly in that with which the school is now connected by its locality. When the pupil intends to devote himself to teaching in the grammar classes of the colleges, or is found not to have the requisite ability for taking a high rank in the body of instructors, he passes at once from the first year's course to the third, and competes, accordingly, in the examination of adjuncts (agreges). The consequences of the low esteem in which the grammar studies are held have been much deplored by the present director of the school,* and a reform in regard to them has been attempted, with partial success.

The courses are conducted by teachers called masters of conferences, who seldom lecture, but question the pupils upon the lessons which have been appointed for them to learn, give explanations, and are present while they interrogate each other, as a kind of practice in the art of teaching. In some cases, the students themselves act as masters of conferences.

The course of letters of the *first year* comprised, in 1836–7,†

1. Greek language and literature, three lessons per week. 2. Latin and French literature, three lessons. 3. Ancient history and antiquities, three lessons. 4. A course of philosophy higher than that of the colleges, three lessons. 5. General physics, one lesson. Chemistry, one lesson, the courses being introduced chiefly to keep up the knowledge of these subjects. 6. German and English language, each one lesson.

The conferences, or lessons on general physics, chemistry, and the modern languages, are by pupils who give instruction and explanations to their comrades.

At the end of the first year there are examinations, according to the result of which the student passes to the courses of the second year, or, in the case before stated, to those of the third year, or leaves the school. These examinations are conducted by inspectors-general of the university, named for the purpose by the minister. Pupils who have passed, may present themselves at the university as candidates for the degree of licentiate of letters.

The *second year's* course of letters does not necessarily include any scientific studies.

The courses of language and philosophy go into the history of these subjects. They consist of—1. Lectures on the history of Greek literature, three lessons per week. 2. On the history of Roman literature, two lessons. 3. On the history of French literature, one lesson. 4. English language, one lesson. 5. On the history of philosophy, two lessons. 6. Continuation of the historical course, two lessons. The recitations are accompanied by suitable written exercises.

* Rapport sur les travaux de l'école normale pendant l'année, 1835–6. Par M. Cousin.

† The distribution of subjects is taken from a manuscript kindly furnished to me by the director of studies, M. Viguier; it does not agree precisely with the plan marked out in the regulations.

At the end of the year the pupils are examined. Those who have not already obtained the degree of licentiate of letters are now required to do so, or to leave the school.

The examinations for this degree consist of compositions in French and Latin prose, on different days. Latin verses and Greek themes. Explanations of selected passages from the second book of Herodotus, the speech of Pericles in Thucydides, the Gorgias of Plato, the speech of Demosthenes against Leptines, the choruses of Œdipus at Colonos, the Hecuba of Euripides, the combat of Hercules and Amycus in Theocritus, the Hymns of Synesius, Cicero de Oratore and de legibus, the Germany of Tacitus, the Treatise of Seneca de beneficiis, the last two books of Quintilian's Rhetoric, the fifth book of Lucretius de natura rerum, the first book of Horace's Epistles, the second book of Horace's Odes, the Troas of Seneca.

These books are liable to be changed, from time to time, on notice being given. The candidate is expected to answer the questions on philosophy, literature, history, and philology, to which the reading of the author may give rise.

In the *third year* of letters, the courses are special, the divisions corresponding with the courses of the royal colleges, and consisting of grammar, humanities, and rhetoric, history, and philosophy. Each pupil takes his place in one or other of these divisions, and is not required to follow the courses of the others.

The lectures and recitations constituting the entire course of letters of the third year were, during the second half year of 1836–7—1. Latin language and grammar, three lessons. 2. Greek language, two lectures and one lesson. 3. Latin literature, two lectures and one lesson. 4. Greek literature, two lectures and one lesson. 5. Latin eloquence, two lectures. 6. Latin poetry, two lectures. 7. French literature, one lesson. 8. History of the philosophy of the ancients, two lectures. 9. Ancient geography, two lectures. 10. Philosophy, one lesson. The lectures alluded to are those attended by the pupils at the Sorbonne.

The following were the courses of the different years in the section of science during the same term, the lectures being those of the faculty of sciences of the university.

First year. 1. Astronomy, two lessons per week. 2. Descriptive Geometry, two lessons. 3. Chemistry, two lectures, one lesson, and four hours of manipulation. 4. Botany, one lesson. 5. Philosophy, two lessons. 6. German language, one lesson. 7. Drawing, one lesson, during the week, and one on Sunday.

Second year. 1. Physics, two lectures, two lessons, and one hour of manipulation. 2. Chemistry, two lectures. 3. Botany, one lesson. 4. Vegetable physiology, two lectures. 5. Calculus of probabilities, two lectures. 6. Differential and integral calculus, two lectures and two lessons. 7. Drawing, one lesson during the week, and one on Sunday.

Third year. 1. Mechanics, four lectures and two lessons. 2. Chemical analysis, two lectures and one hour of manipulation. 3. Chemistry, one lecture. 4. Natural history, two lessons. 5. Geology, one lesson. 6. Botany, one lesson. 7. Drawing, one lesson. On Sunday, the pupils make botanical and geological excursions into the environs.

The pupils undergo similar examinations to those of the section of letters, and before presenting themselves as candidates for the place of adjunct, they must have taken at least the degree of licentiate of sciences. They are however, specially relieved from the necessity of matriculating in those courses at the university which they attend in the school, and which otherwise would be necessary in order to obtain the degree of licentiate. These are, for the mathematical sciences, the differential and integral calculus and mechanics; for the physical sciences, physics and chemistry; and for the natural sciences, geology, botany, &c. The examination for the degree of licentiate of mathematical science may be made at the end of the second year, by pupils of this section of the normal school, and that for licentiate of physical science at the close of the third year.

The programmes of the several lessons* in both sections are prepared by the masters, and submitted to the council of public instruction every year before the beginning of the course.

Besides these lectures and recitations, the pupils are required to attend such other lectures at the faculty of letters or of sciences of the university, or any other public institution, as may be designated to them. At the termination of the third year's course, in the month of July, they are examined in the school, and present themselves as competitors for the places of adjuncts, according to the special studies which they have pursued.

The courses of the school are arranged in reference to the competition for these places, an account of the examinations for which has already been given in the general description of secondary instruction in France. In this competition they are brought in contact with the best talent which has chosen a different road to preferment from that offered by the normal school. Success in this trial is, of course, not always a fair criterion of the state of the school, but certainly offers, on the average, an idea of the merits of its different departments, and is so used in directing their improvement. It may be of interest, therefore, to give the results of one of these competitions, namely, that for 1836. The judges of the competition for the places of adjuncts in philosophy report ten candidates for the six places; of these, five of the successful ones were from the normal school, but the first was from another institution. For six vacancies in the higher classes of letters there were thirty candidates examined, and of these, two of the successful ones, including the first upon the list, were pupils of the school. For adjuncts in the sciences there were eight places and nineteen candidates, the school furnishing six of the successful competitors, and among them the first on the list. In history and geography there were eight candidates for five places; the institutions from which they came are, however, not stated. In grammar, there were forty-one candidates for eight places; of the successful competitors the school sent five, and among them the first on the list.

The keen nature of this competition, while it excites the pupils of the school to great exertion, produces a most deleterious effect upon the health of the more feeble. Indeed, their general appearance, when compared with those of other young men of the same age, is far from favorable. It is part of a system which is considered adapted to the national character, but which is certainly by no means a necessity for men in general, since the teachers of the German gymnasia are prepared without its severe pressure.

The collections subsidiary to the instruction are—1st. A library of works relating to education and to the courses of study, which is open for two hours every day, and from which the students may receive books. This library is under the charge of the sub-director of studies. The students are, besides, furnished with the books which they use in their classes at the expense of the school, and which, unless injured, are returned by them after use. 2d. A small collection of physical apparatus. 3d. A collection of chemical apparatus connected with a laboratory, for practice in manipulation. The courses of manipulation are not, however, carried out to their due extent, and the study-rooms are common to many individuals. The pupils are divided into two sections for study, each of which is in charge of one of the superintending masters.

Discipline.—Though there are minute regulations for discipline, the age of the pupils and the character of their pursuits and expectations render the exercise of severity but little necessary. At the time of my visit to the school, in 1837, the youngest pupil was seventeen years of age, and there were but four of between eighteen and nineteen connected with it.

Much difference of opinion exists as to whether the frequent permissions to individuals to leave the premises should not be replaced by excursions made by the whole of the pupils, under the supervision of an officer. At

* A series of programmes is given in full in M. Cousin's work, before referred to.

present, Sunday is a day of general leave of absence, and on Thursday afternoon individual permissions are freely granted by the director of studies.

This institution occupies the same rank with those attached to some of the Prussian universities, and intended to prepare masters for the gymnasia. It has an advantage over them in the spirit produced by the greater numbers of its pupils, and by the closer connection with the school, which results from their studying and residing within its walls. It is, in turn, inferior to the seminaries for secondary teachers at Berlin, in the absence of arrangements for practical teaching, and in even a more important respect, namely, the want of that religious motive of action which forms the characteristic of the Prussian system. The deficiencies of this great school, in regard to both religious and practical education, struck me, I must confess, very forcibly.*

* In the general tenor of the foregoing remarks, I have the sanction of M. Cousin, in the preface to his account of the Normal School, already referred to.

See National Education in Europe, by Henry Barnard.

VIII PUBLIC INSTRUCTION IN SWITZERLAND.

THE following general outline of the educational institutions of Switzerland, will be found to contain not only an interesting notice of the Normal Schools of that country, but also valuable hints respecting the compulsory attendance of children at school, and school inspection, as well as the relations of education to pauperism. It is abridged from a recent work by Joseph Kay, published by J. Hatchard and Son, London, 1846, entitled "*The Education of the poor in England and Europe.*"

"Perhaps of all countries Switzerland offers the most instructive lesson to any one investigating educational systems and institutions. It is divided into twenty-two independent cantons, each of which manages its own internal policy after its own peculiar views; so that the educational systems of the several cantons differ very materially, whilst the federal government which unites all, brings all into intimate connection one with another, and facilitates improvement, as the institutions which are found to work best are gradually adopted by all the different governments. Each canton being acquainted with the systems pursued by the others, the traveler is enabled, not only to make his own observations on the various results, but is benefited also by the conversation of men accustomed to compare what is being done by their own government with what is being done by others, and to inquire into the means of perfecting their educational systems.

But the advantage to be derived from an investigation of the various efforts made by the different cantons, is still further increased by the fact of their great difference in religious belief. Thus, the population of the canton of Vaud, for example, is decidedly Presbyterian,—that of Lucerne is almost exclusively Roman Catholic, whilst those of Argovia and Berne are partly Protestant and partly Roman Catholic. Not only, therefore, does the traveler enjoy the advantage of studying the educational systems of countries professing different religious creeds, but the still greater one of witnessing the highly satisfactory solution of the various difficulties arising from differences of religious belief existing under the same government.

The great development of primary education in Switzerland, dates from 1832 or 1833, immediately after the overthrow of the old aristocratical oligarchies. No sooner did the cantonal governments become thoroughly popular, than the education of the people was commenced on a grand and liberal scale, and from that time to this, each year has witnessed a still further progress, until the educational operations of the several governments have become by far their most weighty and important duties.

Throughout all the cantons, with the exception of Geneva, Vallais, and

three small mountainous cantons on the Lake of Lucerne, where the population is too scanty and too scattered to allow of the erection of many schools, education is compulsory; that is, all parents are required by law to send their children to school from the age of six to the age of fourteen, and, in several cantons, to the age of sixteen. The schoolmasters in the several communes are furnished with lists of all the children in their districts, which are called over every morning on the assembling of school; the absentees are noted, and also the reasons, if any, for their absence; these lists are regularly examined by the inspectors, who fine the parents of the absentees for each day of absence.

In some of the manufacturing districts, the children are permitted to leave school and enter the mills at the age of eleven, if they have then obtained from the inspectors a certificate of being able to read and write; but they are obliged to attend a certain number of periodical lessons afterward, until they attain the age of fourteen or fifteen. In the canton of Argovia, however, which is one of the manufacturing districts of Switzerland, the children are not allowed to enter the mills until they attain the age of thirteen, and I was assured by several of the manufacturers of this canton, that they did not suffer any inconvenience from this regulation, although it had been warmly opposed at first by the commercial men.

It ought to be remembered, that these laws are enforced under the most democratic forms of government.

The people themselves require attendance at the schools, so conscious are they of the necessity of education to the encouragement of temperance, prudence, and order.

In the cantons of Berne, Vaud, Argovia, Zurich, Thurgovia, Lucerne, and Schaffhouse, where this law is put into force most stringently, it may be said with truth, that all the children between the ages of seven and fifteen are receiving a sound and religious education. This is a most charming result, and one which is destined to rapidly advance Switzerland, within the next eighty years, in the course of a high Christian civilization. One is astonished and delighted, in walking through the towns of the cantons I have mentioned, to miss those heart-rending scenes to be met with in every English town; I mean the crowds of filthy, half-clothed children, who may be seen in the back streets of any of our towns, groveling in the disgusting filth of the undrained pavements, listening to the lascivious songs of the tramping singers, witnessing scenes calculated to demoralize adults, and certain to leave their impress on the susceptible minds of the young, quarreling, swearing, fighting, and in every way emulating the immorality of those who bred them. There is scarcely a town in England and Wales whose poorer streets, from eight in the morning until ten at night, are not full of these harrowing and disgusting scenes, which thus continually show us the real fountain-head of our demoralized pauperism. In Switzerland nothing of the kind is to be seen. The children are as regularly engaged in school, as their parents are in their daily occupations, and henceforward, instead of the towns continuing to be, as in England, and as they have hitherto been in Switzerland, the hot-beds and nurseries of irreligion, immorality, and sedition, they will only afford still more favorable opportunities, than the country, of advancing the religious, moral, and social interests of the children of the poor. How any one can wonder at the degraded condition of our poor, after having walked through the back streets of any of our towns, is a thing I never could understand. For even where there are any schools in the town, there are scarcely ever any playgrounds annexed to them; so that in the hours of recreation the poor little children are turned out into the streets, to far more than forget all the moral and religious counsel given n the school. It is strange that we do not understand how invaluable

the refuge is, which a school and playground afford to the children of the poor, however indifferent the education given in the school.

This small country, beautified but impoverished by its Alpine ranges, containing a population* less than that of Middlesex, and less than one-half its capital, supports and carries on an educational system greater than that which our government maintains for the whole of England and Wales! Knowing that it is hopeless to attempt to raise the character of the education of a country without first raising the character and position of the schoolmaster, Switzerland has established, and at the present moment supports, thirteen Normal schools for the instruction of the schoolmasters and schoolmistresses, whilst England and Wales rest satisfied with six! Eleven of these schools are permanent, and are held during the whole of the year; the remaining two sit only for about three months yearly, for the purpose of examining monitors recommended by the masters of the primary schools, and desirous of obtaining diplomas to enable them to act as schoolmasters. In the majority of these schools the members of the different religious sects are received with a willingness and with a Christian charity, which puts to shame our religious intolerance. Nor does this liberality proceed from any carelessness about the religious education of the people, for no master can obtain, from his canton's government, a diploma, to enable him to officiate as schoolmaster, without having first obtained from a clergyman of his own church a certificate of moral character and of competency to conduct the religious education in the school for which he is destined; but it proceeds rather from a recognition of this great truth, that the cause of religion must be deeply injured by neglecting the secular education of the people, and from a Christian resolution in all parties to concede somewhat, for the sake of insuring what must be the foundation of all social improvement, the advancement of the intelligence and morality of the people. M. Gauthey, a Presbyterian clergyman, and director of the Normal schools at Lausanne, M. Vehrli, director of the Normal school near Constance, the professors of the Normal school in Argovia, M. Schneider von Langnau, minister of public instruction in the canton of Berne, and M. Fellenberg, of Hofwyl, all assured me that they did not find the least inconvenience resulting from the instruction of different sects in the same schools. Those who differ in faith from the master of the school are allowed to absent themselves from the doctrinal lessons given in the school, and are required to attend one of their own clergy for the purpose of receiving from him their doctrinal instruction.

Even in Fribourg, a canton governed by Catholic priests, Protestants may be found mingled with the Catholics in the schools, and are allowed to absent themselves during the hours of religious lessons; and, in Argovia, a canton which has lately so distinguished itself by its opposition to the Jesuits of Lucerne, I found that several of the professors in the Normal school were Catholics, and that the utmost tolerance was manifested to all the Catholics attending the cantonal schools.

The Swiss governments perceived, that if the powerful sects in the several cantons were to refuse education to the Dissenters, only one part of the population would be educated. They perceived also, that secular education was necessary to the progress of religious education, and that they could secure neither without liberality; and therefore they resolved that all the children should be required to attend school, and that all the schools should be opened to the whole population.

In the canton of Neuchâtel, they have no Normal school, but they choose their masters from the monitors of the primary schools, who are most carefully educated and trained by the masters of the primary schools

* In 1846 the population of Switzerland was about 2,400,000.

for their future important situations. Notwithstanding their greatest exertions, however, to choose persons qualified for this most important post, I was assured by those interested in the progress of education in that canton, that they found the present system totally inadequate to the production of efficient masters, and that they felt that they must follow the example of the other cantons, and establish a permanent Normal school. In the cantons of Fribourg and Schaffhouse the Normal schools sit only during three months of the year, during which time they give lectures to those desiring to be schoolmasters, and examine the candidates before granting the diplomas. But so totally inefficient have they found this system, that Fribourg is about to establish a Normal school during the present year, and Schaffhouse has only been prevented from doing so by the want of sufficient funds.

I was assured by the priests in the one canton, and by the Protestant clergy in the other, that they were fully convinced that no efforts on their part could insure good masters, unless they were aided by a sufficiently long religious, intellectual, and domestic training, under the eye of experienced and trustworthy professors.

Four of the Normal schools of Switzerland contain each from eighty-five to one hundred pupil-teachers; the rest average from forty to eighty.

It may seem extraordinary to some that so small a country as Switzerland should require so many schools for teachers, but the explanation is very simple. Switzerland is a poor country, and although it gives the schoolmaster a very honorable station in society, and regards him as next in dignity to the priests and clergy, it is not able to pay him very well, so that in many cases there is no other inducement to a schoolmaster to remain long at his post, than the interest he feels in his profession. From this cause there is always a constant desertion from the ranks going on in some parts, and a consequent necessity for the preparation of a sufficient number to fill the vacant posts. If the masters were paid better, Switzerland would be able to dispense with two or three of its Normal schools.

I should like to enter upon a description of the different Normal schools of Switzerland, were not that rather beside the purpose of this report; but I cannot refrain from recording the unanimous opinion of the Swiss educators on two points connected with these schools. These are, the necessity of manual labor in connection with the instruction given in the schools, and the time which all are agreed upon as necessary to the perfecting of a schoolmaster's education. On the latter point, all with whom I conversed assured me, that their experience had taught them that three years were absolutely necessary for the education of a master; that wherever less time had been tried, it had always been found insufficient; and that in order that even three years should suffice, it was necessary that the young man entering the Normal school should have completed his education in the primary schools.

With respect to the necessity of manual labor in a Normal school, opinions were hardly less unanimous. To the Bernese Normal schools, as well as to that at Kruitzlingen, conducted by Vehrli, the successor of Pestalozzi and Fellenberg, and to the Normal schools of Lucerne and Solleure, lands have been annexed, which are farmed and cultivated by the pupil-teachers. They are sufficiently extensive, in five of these schools, to employ all the young men in the Normal school at least two hours per diem in their cultivation. On these lands all the pupil-teachers, accompanied by their professors, and clothed in coarse farmers' frocks, with thick wooden sandals, may be seen toiling most industriously about the middle of the day, cultivating all the vegetables for the use of the household, as well as some for the neighboring markets, and could any one be taken among them at that period of the day, he would imagine he saw before him a set

of peasants at their daily labor, instead of the young aspirants to the much respected profession of schoolmaster.

Besides this labor in the fields, the young men are also required to clean their apartments, to take charge of their own chambers, prepare their own meals, besides keeping all the premises in good repair. Thus the life of the pupil-teacher in Switzerland, during the time he remains at school, is one of the most laborious nature. He is never allowed to lose sight of the manner of life of the class from which he was selected, and with which he is afterward required to associate. He is never allowed to forget that he is a peasant, so that he may not afterward feel any disgust in mingling with peasants. In this manner, they train their teachers in habits of thought and life admirably suited to the laborious character of the profession for which they are destined, and to the humble class who will be their companions in after life. The higher the instruction that is given to a pupil-teacher, the more difficult and the more important is it to cherish his sympathies for the humble and often degraded class among whom he will be called to live and exercise his important duties.

In fact, as all the Swiss educators said, the great difficulty in educating a teacher of the poor is to avoid, in advancing his intelligence and elevating his religious and moral character, raising his tastes and feelings so much above the class from which he has been selected, and with which he is called upon afterward to associate, as teacher, adviser, and friend, as to render him disgusted with his humble companions, and with the toilsome duties of his profession. In educating the teachers, therefore, far above the peasant class whom they are intended to instruct, the Swiss cantons, which I have mentioned, are very careful to continually habituate them to the simplicity and laborious character of the peasant's life, so that, when they leave the Normal schools, they find that they have changed from a situation of humble toil to one of comparative ease. They do not therefore become dissatisfied afterward with their laborious employments, but are accustomed even from their childhood to combine a high development of the intellect and a great elevation of the character with the simplicity and drudgery of a peasant's occupations.

Thus the Swiss schoolmasters live in their villages as the coadjutors of the clergy, associating with the laborers in their homes and at their firesides, whilst at the same time they exhibit to them the highly beneficial and instructive example of Christian-minded, learned and gentle peasants, living proofs of the benefits to be derived from possessing a properly educated mind.

I cannot deny myself the pleasure of giving Vehrli's opinion on this subject. He said, 'Your object in educating a schoolmaster ought to be, to prepare a teacher of the people, who, whilst he is considerably elevated in mental acquirements above those among whom he will be obliged to mingle, shall thoroughly sympathize with them by having been himself accustomed to hard manual labor. If you take pupil-teachers into your Normal schools, and content yourselves with merely cultivating their mental powers, you will find that, however carefully you tend their religious instruction, you have educated men who will soon, despite themselves, feel a disgust for the population with whom they must associate, and for the laborious duties which they will have to perform; but if during the whole of their residence at the Normal school, you accustom them to hard and humble labor, when they leave, they will find themselves in higher and easier situations than when they were at school, they will sympathize with their poor associates, and feel contented and satisfied with their position.'

In Argovia they have so strongly felt the truth of the above remarks, that they have resolved to adopt M. Vehrli's suggestions, and to annex

lands to their Normal school; and in the canton of Vaud, where no labor is required from the pupil-teacher, I was assured that they had constant reason to complain of the dissatisfaction expressed by the teachers for their profession after leaving the Normal school. Nor is it only by means of agricultural labor that Vehrli endeavors to prepare his pupils for the honorable but arduous duties of their future lives. Nearly all the domestic concerns of his household are conducted by the pupil-teachers, and all assistance that is not absolutely necessary is dispensed with. Vehrli assured me that by these means the expenses of maintaining his Normal school were greatly diminished, as they sent to market all the surplus of their agricultural produce, and employed the proceeds in defraying the ordinary expenditure of the school.

But whilst the Swiss cantons are thus careful to prepare the pupil-teachers for the practical duties of their lives, they do not neglect their intellectual instruction; as they are fully convinced that the instruction given in a village school by an ignorant man must not only be very meager in kind, but very unattractive in character. In order to attain a certain standard of instruction in a village school, the education of the master should be very much elevated above it; and in order to make the poor prize the village school, it is necessary that they should have a very high opinion of the character and learning of the teacher.

The education given by these masters in the parochial schools includes, 1. Religious instruction. 2. Reading. 3. Writing. 4. Linear drawing. 5. Orthography and grammar. 6. Arithmetic and book-keeping. 7. Singing. 8. The elements of geography, and particularly of the geography of Switzerland. 9. The history of Switzerland. 10. The elements of natural philosophy, with its practical applications. 11. Exercises in composition. 12. Instruction in the rights and duties of a citizen.

In the Catholic cantons, however, the instruction is generally confined to religious lessons, reading, writing, and arithmetic.

No teacher is allowed to undertake the charge of a school, until he has obtained from the council of his canton, whose duty it is to examine candidates, a diploma stating his capability of directing the education of a school. This diploma is only granted after a very severe examination, which the candidate must pass before he can become a schoolmaster. Besides this, he must have obtained a certificate of character from the director of the Normal school in which he was educated, and in many cases another from a clergyman of his own sect, stating his capability of conducting the religious education of a school. This latter point is always strictly inquired into, either by the council of inspection, which examines the candidates, or by a clergyman of the sect of which the candidate is a member. The character and abilities of the teachers are not considered in Switzerland as matters of small concern, but on the contrary, every precaution is taken to guard against the possibility of a man of low character or poor education obtaining such a post. It is happily understood in the Swiss cantons, that such a schoolmaster is much worse than none at all. The influence of such an one on the young is demoralizing in the extreme, and does infinite mischief, by creating in the minds of the children associations connecting the name of school with unhappy thoughts, and thus often actually engendering a spirit of hostility, not only against education, but also against the holy precepts which were professedly taught at school.

I consider the very backward state of education in some of these cantons, compared to the great progress it has made in others, as a satisfactory proof of the necessity of adopting a centralization system in preference to one leaving the direction of education to provincial governments. I know there are many in our own country who blindly cry out against centralization, not reflecting that the central government, as being the

richest and most powerful body, can most easily collect sufficient statistics on the comparative merits of different systems, and on the comparative results of different ways of teaching and managing a school, and that it affords a much greater security to the country than the best provincial governments can do,—that what is found to work best shall be speedily introduced throughout the country, and that education shall be universally spread, instead of being greatly developed in one part of the country, and altogether neglected in another.

Each canton in Switzerland is divided into a certain number of communes or parishes, and each of these communes is required by law to furnish sufficient school-room for the education of its children, and to provide a certain salary, the minimum of which is fixed by the cantonal government, and a house for each master it receives from the Normal school of the canton. These communal schools are, in the majority of cases, conducted by masters chosen from the most numerous religious sect in the commune, unless there are sufficient numbers of the different religious bodies to require more than one school, when one school is conducted by a master belonging to one sect, and the other by a master chosen from a different sect. The children of those parents, who differ in religion from the master of the school, are permitted to absent themselves from the doctrinal lessons, and are required to obtain instruction, in the religious doctrines of their own creed, from clergy of their own persuasion.

The inspection of the cantonal schools is conducted in the most satisfactory manner. Each canton has a board of inspectors, or council-general of instruction, which is presided over by the Minister of Public Instruction for the canton, and whose duty it is, to visit all the schools of the canton, once at least in the year, and to report on them individually to the government of the canton, as to the state of the schools themselves, as to the progress of the pupils, as to the character of the instruction given by the master, and as to the attendance of the children of the commune.

But besides the cantonal board of inspectors, there is also in each commune a board of inspectors, who are elected annually from among the clergy and educated men of the commune, and who visit the communal schools at least once each year, and report to the Minister of Public Instruction for the canton, on the individual progress of the children in the communal schools. The head inspector of the canton of Solleure showed me samples of the handwriting, composition, accounts, &c., of all the children in the canton. By these means each schoolmaster is encouraged in his exertions, as he feels that the eyes of his canton are upon him, and that he is regarded as a most important public functionary, to whom is committed a great and momentous trust, for the proper discharge of which it is but right his canton should receive constant assurance.

By these means the different communes or parishes are immediately interested in the progress of their schools, whilst the government is insured against the possibility of a school being wholly neglected, as every school is sure of receiving one or two visits from the government inspectors, even if the parochial authorities should wholly neglect them, or should not pay them sufficient attention.

This is the true theory of a system of inspection. There ought always to be a system of local inspection, because local authorities are able, when active, to discover better than any stranger can possibly do, the peculiar wants and requirements of their localities, as well as the real character of their teachers, and because a system of local inspection provides a continual check upon the schoolmaster; but as persons, who have other and pressing duties upon their hands, and who are deeply engaged in business or in agricultural pursuits, are very likely to neglect at times, and often altogether, the important duty of attending to the schools of their neighborhood, and as schools, which receive no surveillance from persons

qualified to judge of their particular merits or demerits, are always sure to degenerate, and are liable to become seriously demoralized; and as, moreover, it is deeply important that every government, for the sake of social order and also for the sake of the happiness and morality of its subjects, should have every security that the people are really educated and not demoralized by a sinful sham of education, it is necessary that in every well-governed state, where the government takes any interest in the improvement of the people, there should be a central inspection of all the schools of the country, which should be supported and directed by the government. If government has not the power of examining every school, it can have no security that the children are not being absolutely demoralized, and that the seeds of future rebellion and sedition are not being sown in the village schools. In many of the neglected schools of England and Wales at the present day, this is actually the case, and just because the schoolmasters, in many instances, are never visited and watched by any person capable of judging of the moral condition of their schools.

The development of the people's education in Switzerland and France is of far too recent a date to allow me to speak of its results. It is not in thirteen years that the habits, opinions, taste, and manners of a people can be changed. A change in a nation's character is not wrought in one generation; so that nothing can be more unfair than the language held by many persons on this subject. If any thing is said of French and Swiss education, the answer is, 'Look at its results.' 'The people of these two countries are the most disaffected and turbulent in Europe.' I repeat, that nothing can be more unfair than this reasoning. The real development of education dates in both countries from 1833, so that but few of the age of thirty in either country can have reaped any advantage from it, and of those below thirty, many can not have been able to attend any good school for more than two or three years, and many others not at all, whilst of those young men, who have enjoyed the advantages of attending a school directed by an able and efficient master, many must have received as much harm from the evil influence of demoralizing homes, as they have reaped benefit from the ennobling effect of the lessons and examples given them by a Christian and noble-minded schoolmaster. It is only when the corrupting influences of the old, ignorant, and demoralized generations have passed away, when the parents themselves have begun to estimate the advantages to be reaped from education, when the lessons of the teachers are backed by the lessons and examples of the parents, that the effects of education will begin to be apparent. This requires more than one generation, and much more than thirteen years; and it is this very slowness in the working of an educational system, however perfect, which renders me the more anxious that we should speedily prepare for the coming future.

Such is a short outline of the general character of the educational systems of Switzerland.

At the present time it may be truly said, that in nearly the whole of Switzerland, every boy and girl below the age of seventeen years, can read and write. The education of the girls is perhaps in a more satisfactory condition in the Catholic cantons than in the Protestant. It is confided to the special care of the nuns, and I can bear testimony to the gentle, patient, and religious spirit in which these excellent women affectionately tend the progress of the young girls. The self-denying life which the Catholic nuns lead, and the excellent education they receive in the nunneries, admirably suit them for the important duties confided to their charge in these cantons. After examining the schools conducted by some of the sisters in Fribourg, the abbess of the nunnery, to which the nuns who had the direction of the female schools belonged, allowed me, in com-

pany with a very intelligent priest, with whom I had been spending some days, to visit the nunnery. We went over it in company with one of the sisters. When I entered, I found myself in the presence of about twenty of the nuns, who, under the direction of a very venerable old abbess of about eighty years of age, were seated in the entrance-hall, engaged in making clothes for the poor.

The apartments of the sisters were of the plainest possible description. They were in beautiful order, and perfectly clean; but furnished very meagerly, and literally destitute of every thing that was not absolutely necessary. The sisters have no servants and no assistants. They prepare their own food, clean their own chambers, take charge by turns of the dining-room, hall, and room of the abbess, and, in fact, perform by turns all the humblest duties of domestic servants. They, at the same time, give a very excellent education to the young persons destined to take the veil, comprising reading, writing, arithmetic, history, geography, grammar, and singing. The novitiates are, therefore, in every way admirably prepared for the duties of instruction, which they undertake after having taken the veil, whilst the humble life to which they are accustomed during the years of their novitiate, and during the rest of their lives, in turn with the other sisters, makes them admirably well qualified for intercourse with the poor, and renders them patient, gentle, and persevering in their efforts in the schools. They certainly are living examples of the class of teachers a good training is capable of producing.

The condition of the peasantry in the Protestant cantons of Berne, Argovia, Vaud, Thurgovia, Neuchatel, Geneva, Basle, and Schaffhouse, and in the Catholic cantons of Solleure and Lucerne, is a very happy one. No beggars are to be seen in these cantons, and what is still more surprising, no signs of pauperism. Their dress, though homely, is always good, free from patches, and clean. Their cottages, though, from the smoked appearance of the timber, at first sight giving an idea of great poverty, are nevertheless very commodious, substantially built, and comfortably furnished, and what is more, they are their own. They are generally surrounded by their little gardens, and almost always stand on plots of land which belong to and are cultivated by the tenants, and no one, who has seen the garden-like appearance of the cantons of Berne, Vaud, Solleure, Argovia, Thurgovia, and Zurich, will doubt again the high state of cultivation which may be attained by small farmers, proprietors of their own farms. The Swiss proprietor, himself a farmer, is interested in the state of his little property, and he is not a man to reject the aid of science, or to shut his ears to advice, or his eyes to observation. Their small farmhouses are the pictures of neatness, and their little estates are tended with the care an Englishman bestows upon his flower-garden. By far the greater part of the population are themselves proprietors, and the lands are so subdivided, as to bring them within the reach of the poorest laborer. This acts as the happiest preventive check on early and improvident marriages, and as the strongest possible incentive to providence and self-denial. Owing to this cause, the earliest age at which a young man thinks of marrying in several cantons is twenty-five, as he spends the first part of his life, after he has begun to earn any wages, in laying by some little capital toward the purchase of a house and piece of land. When he can offer a certain share of the purchase-money, he pays it over to the vendor and enters into possession, clearing the rest of his debt by yearly payments. It is only after he has thus attained the great object of his wishes that he marries. Many even of the laborers in the towns own or rent their little properties outside. The happy effects of this system are manifest not only in the excellent check it affords to imprudently early marriages and in the happy stimulant to prudence and sobri-

ety, but also and more particularly in the interest it gives the country peasants in the maintenance of social order.

The Swiss have so clearly understood that the real cause of pauperism is want of prudence and foresight among the poor, that the people themselves, in three of the most democratic of the cantons, have not only resolved, that all children should be forced to attend school for a certain number of years, and that the descent of lands should be so arranged, as to insure a great subdivision and make the separate estates small and numerous; and have not only created, by these means, strong incentives to prudence among the poor, by elevating their tastes, by teaching them the great benefits to be derived from temporary self-denial, and by holding out to the saving and self-denying laborer the prospect of becoming a proprietor; but they have also enacted laws, which prohibit any man marrying, until he prove to the state that he is able to support his wife. It must be remembered, that these laws are put in force by the people themselves. So clearly is it understood in Switzerland that the true cause of pauperism in a well-governed state can only be ignorance, and improvidence resulting from ignorance, or some misfortune which could not have been foreseen; and that it is only the pauperism resulting from this latter cause for which a well-organized community ought to be called upon to provide."

OUTLINE

OF THE

NORMAL COURSE OF INSTRUCTION AT HOFWYL.

The Rural or Agricultural School at Hofwyl was designed to be a seminary for teachers, as well as a school for those devoted to labor. Both Fellenberg and Vehrli deem it very important for all who are to be employed in the instruction of common schools to have a thorough acquaintance with the practical labor of a farm. As an additional provision for their support, and as an invigorating exercise, it will be desirable for them (as indeed it probably would be for all literary men) to continue these labors. But a practical acquaintance with the life and habits of a majority of their pupils is the only means of preparing them fully to enter into the views and feelings of those under their care, to understand their wants and their difficulties, and prepare them for their duties. It also furnishes many important illustrations and topics of remark. It enables them to give much valuable information of a practical kind in connection with the subjects of their studies, and much may be done in this way to extend agricultural improvements. It is also an additional means of securing the attachment of the teachers to those to whom it is desirable their labors should be devoted, and inducing them to continue in this employment. So much is this object appreciated in some of the seminaries for instructors in Germany, whose plan and location do not admit of a farming establishment, that a garden and a nursery of fruit-trees are annexed to the seminary, and regular instruction is given in connection with them.

The direct preparation of the teachers for their profession consists,—1. In a thorough study of the branches to be taught, which they acquire in common with the other pupils, and on the productive plan. 2. In a series of lessons designed especially for them, in which Vehrli directs them as to the method of communicating instruction. 3. In assuming alternately the place of teachers in this class, under the immediate inspection of Vehrli. 4. In acting alternately as instructor and monitor to the other pupils, and superintendents of their conduct, under the general direction of Vehrli. 5. In the daily advice and direction they receive from him in the discharge of these duties. 6. In witnessing his own methods of instruction, as he passes from class to class to observe their progress. 7. In the discussions connected with a meeting for familiar conversation. 8. Those who are qualified for a more extended course of study are permitted to attend the lessons of the professors in the Literary Institution; and some are employed in the instruction or superintendence of the younger pupils in that school. Indeed, Fellenberg has found that those who were trained in the

Agricultural Institution were among the most valuable and faithful educators he could obtain; and on this account he deems an establishment of this kind an important aid to one of a more scientific or literary character. It is with the aid of assistants thus trained that Vehrli has succeeded in rendering a school, often composed of the worst materials, a model of order, industry, and improvement, which has excited the admiration of all who have visited it.

The following is a sketch of the course of instruction pursued with the class of teachers which annually assembled, by invitation and at the expense of Fellenberg, at Hofwyl:

"The first object was to ascertain, by free conversation or examination, the intellectual condition of the teachers, and to arrange them in classes, and provide means of instruction adapted to their wants: they were connected in such a manner that the better informed might assist those who were less familiar with the subject, and that they might enjoy the advantages of mutual as well as general instruction.

The day was opened and closed with religious exercises, in which they were led particularly to consider the duties of their office. Eight hours were assigned to instruction; the evening was devoted to free conversation on the state of the schools and their wants, and the subjects presented in the day; and the teachers had the opportunity of asking general questions, or presenting topics for discussion. Daily lessons were given in language, arithmetic, natural history, and vocal music; three lessons weekly in religion, and the same number in geometry and drawing; and two in geography; and two in *anthropology*, or the description of the human body and mind. Two or three hours daily were specially devoted to repetitions, or the copying of notes. The mode of instruction was adapted to the topic: sometimes it consisted merely in the exhibition of the subject, or of the methods of instruction; but it was accompanied as often as possible by questions to the teachers, and by practical illustrations, either by forming a class among the teachers, or calling in the pupils of the Agricultural School. The object of this course was to give general views of some important topics; to improve and inform the minds of the teachers themselves; and especially to give them a complete view of the methods of teaching. We add an account of the principal courses:

The Maternal Language, or Grammar.—The course of instruction in the mother tongue occupied one hour daily of the course, as being the basis of instruction in all other branches. Clear and precise ideas of the meaning and connection of words, and of the proper mode of expressing our ideas, are not less indispensable to successful study than to the business of life. But the study of language was also presented as an efficient means of exciting and developing the powers of the mind; because it should always be connected with the observation of the things to be described, or reflection on the ideas to be expressed. In short, if properly taught, every step in this study is a practical exercise in logic. Instruction in the mother tongue ought to commence with exercises in speaking, the materials for which should be derived from the objects immediately surrounding the child, or most familiar to him; and are always connected with the exercise of the senses in distinguishing form, color, size, weight, sound, feeling, and taste. It was also urged that the speaking, writing, and reading of the native language should go on together, in alternate exercises, as a part of one course of instruction; and not divided, as they often are. A plan of instruction was described extending through the whole period allotted to school education. The subject was divided into portions corresponding to our division of etymology and syntax; the first

involving simply words and their variations, and the second their connection in sentences. The teachers were advised to present both in such a manner that the pupil could not escape with mere mechanical habits; that he should be compelled to exercise thought and judgment in regard to the meaning and variations of individual words and their modes of combination. The last was especially recommended as the best means of showing the meaning as well as the use of individual words: in short, the methods advised and adopted present the most striking contrast with the mechanical exercises and the parrot-like acquisitions of pupils in grammar in English and American schools.

The more important principles were dictated and written down by the teachers; and questions were asked and answered in illustration. Written exercises on the various points presented, were also prepared and corrected, as far as the time would allow.

Religious Instruction.—The course of instruction in religion embraced, 1. Biblical history of the Old and New Testament; 2. History of the Christian religion; 3. Principles and precepts of Christianity; 4. A brief exposition of the best manner of giving religious or catechetic instruction. The design of this course was two-fold:—

1. To give to the teacher himself clear views of the sacred truths and solemn duties of religion; to enlighten his mind; to strengthen him in the resolute, persevering performance of his duties; to enlarge and ennoble his feelings; and to implant in his heart an unchangeable, cheering hope, which should sustain him in the changes and trials incident to his laborious calling.

2. To render him an able teacher of religion, so far as it falls within the sphere of the common school; and to prepare him, by precept and example, to make his pupils acquainted with the truths of the Bible, and the duties it imposes, and to educate them as disciples of Christ.

Both these objects were kept in view, and each more or less attended to, according to the nature of the subject and the knowledge of the auditors.

Biblical History.—As the history of the Bible was already familiar to the audience, this subject was treated principally in reference to the method of teaching. After a general chronological review of the principal events of the history, and its connection with that of other nations, the experienced teacher of a common school to whom this part of the course was intrusted, examined the various methods of Biblical instruction adopted in the canton of Berne. He warned his hearers against many of those methods, some of which reduce this part of instruction to a mechanical exercise of memory, that destroys its spirit; while others neglect the great object, and employ it merely as a means of instruction in language. He recommended—1. That the teacher should relate each portion of the history in language as much biblical and child-like as possible, and call upon the children to repeat the narration.

2. That he should require them to select the principal and subordinate circumstances, and combine them in their regular order and connection.

3. That he should lead them to draw the conclusions and make the reflections which the history may suggest, under his direction and with his assistance; but that he should carefully guard against the error of attempting to derive too many lessons of a different nature from a single history, for this only enfeebles the influence of the great principle involved, and distracts the mind and the feelings with too great a variety of sub jects. In order to illustrate more completely the methods proposed, a class of children from the Agricultural School was generally brought in, and exercised in the manner proposed.

History of the Christian Religion.—The great objects of this course were, to awaken a deeper and more general interest in the Christian reli-

gion, and to strengthen their faith in its irresistible power, by showing them how light and truth have ever gained the victory amidst all the oppression and persecution they have endured.

The progress of light was traced; the earnest and useless groping after truth described, which preceded the coming of the Saviour, and was only satisfied by his instructions. The political and civil condition of the world at the Christian era, and the influence which Christianity has had in changing or modifying it, by the mutual and undistinguishing benevolence it requires between individuals and nations, and the equal rights which it thus establishes, was made the subject of particular attention. But the attention of the pupils was principally directed to the internal condition of the Christian church in the first three centuries, while it remained comparatively pure: they were pointed to the influence of Christian feelings and a Christian life in the family, the community, and the state; to the invincible power of that faith, and that love to the Saviour and to one another, which triumphed over ridicule and suffering, and martyrdom itself in its most horrid forms. The errors in principle and practice of this early period were also exhibited, with their sad consequences; and the effects of the various extremes to which they led—of slavish formality or lawless licentiousness; of intolerance and of hypocrisy; of superstition and fanaticism; of ecclesiastical despotism, and of anarchy—were presented in such a light as to point out the dangers to which we are still exposed. The time did not allow the extension of the course to later periods of history.

Principles and Precepts of Christianity.—The religious instructor observes, that he endeavored to present this part of his subject in its biblical form, and to show his pupils the inexhaustible richness of Divine wisdom exhibited in the Scriptures, to which reason, when duly enlightened as to its proper sphere, will come as a pupil, and not as a teacher. This revelation, he remarked, made in the language of men, should be the rule by which the exhibitions of the Deity, in nature, and providence, and the mind of man, must be judged. On the other hand, he presented the leading doctrines contained in the formularies of the Swiss churches, but still as subordinate to the biblical exhibition of truth with which the teacher in Switzerland is chiefly concerned. The first subjects of instruction were the general nature of religion, the peculiar character of Christianity, and its adaptation to the nature of man, the admirable form in which it is presented, and the importance of taking the Savior as a model for the methods of religious instruction. The Scriptures were next examined as the sources of religious truth, and the principal contents of the various books described, with the leading evidences of its historical authority, of its inspiration, and of the credibility of the principles it contains. The leading doctrines maintained in the national church were then presented, each accompanied with the evidence and illustrations afforded by the Scriptures, and followed by an exhibition of the duties involved in it, or founded upon it. At the same time, illustrations were derived from nature and from the human heart; and directions were given as to the best mode of teaching these truths to the young.

Methods of Religious Instruction.—The method of giving religious instruction was also taken up in a special manner, at the conclusion of the course: the first object was to point out the manner and order in which the various principles and precepts of religion should be presented to the young in correspondence with the development of their faculties; and the importance of preparing their minds to receive the truths, by making them familiar with the language, and the objects of intellect and feeling in general, instead of calling upon them to pass at once from the observation and the language of the material world, to the elevated truths of religion expressed in terms entirely new, and which leave so many minds

in hopeless confusion, if not in absolute ignorance of their real nature. The distinction of essential and non-essential doctrines was adverted to, and general directions given as to the methods of narrating and examining.

Anthropology, or the Study of Man.—This course was intended to give a general idea of the nature of man, and especially of the construction of our bodies, with a view to illustrate at once their wonderful mechanism, and to direct to the proper mode of employing and treating their various organs. The teacher adopted as his leading principles, to exclude as much as possible all that has not practical importance, and to employ the most simple terms and illustrations which could be chosen. The first great division of the course was devoted to the structure of the human body: it was opened with a brief introduction to natural history, and a comparative view of vegetables and animals, and man, and of the several races of men. The elementary materials of the human frame were then described, and the great and wonderful changes they undergo in receiving the principle of life, and becoming a part of man.

The various systems of the human body, the bones, muscles, vessels, organs, and nerves were next described, and illustrated by a human skeleton and by preparations of animals: the offices of each part were described in connection with its form and situation; thus uniting anatomy and physiology. At the same time, reference was made to the mode of employing them; the common accidents to which they were liable, as dislocations, fractures, &c., and the mode of guarding against them. The second portion of the course was devoted to the subject of Hygiene, or Dietetics; the proper mode of employing and treating the various organs, in order to preserve health and strength. It was opened with some views of the nature and value of health, and the causes which most frequently undermine it. The first object of attention was the organs of reproduction, their important destination, their delicate nature, and the evil consequence of too early excitement or abuse on the rest of the system; with the indications of abuse, and the methods of restoration. The nervous system, in its connection with the subject, led to the consideration of spiritual life, and its connection with the body, through the medium of the nerves. The various passions and affections were particularly described, with their influence upon the health; and the rules of education derived from this topic. Sleeping and waking were then treated as phenomena of the nervous system; and the distinction to be observed between children and adults on this subject was pointed out. The importance of attending to the structure and use of the bed-room and the bed, and even the position in sleep, was also adverted to.

The organs of sense, especially the eye and the ear, were minutely described, with the diseases to which they are liable from improper use or neglect, or from causes injurious to the brain and nervous system in general. The importance of the skin and its functions, and of maintaining its cleanliness by frequent changes of clothing and bathing; the necessity and methods of useful exercise; the precautions which ought to be employed to secure the purity of the air, especially in schools, and to guard against diseases of the organs of respiration, were the subjects of particular instruction. The formation and uses of the blood, the influence of food, and the circumstances in its condition or preparation which render it injurious, the evil effects of alcoholic drinks, and the most obvious causes of injury to the digestive organs, or of interruption in their functions, were afterward discussed in a practical manner. The course was closed with simple directions as to the treatment of injuries produced by sudden accidents, falls, wounds, drowning, freezing, fits, &c., during the time which must elapse before medical aid can be procured, or when it is not within reach—a species of knowledge for want of which many a life has doubt-

less been lost, and which is peculiarly important to one who is entrusted with the care of a large number of young persons. Indeed, what more valuable gift could be made to a collection of American teachers than such a course of instruction; a course which every well-informed physician is capable of giving?

Geography.—The course of instruction in geography was designed to point out the best methods of teaching facts already familiar to the audience. Two principles were laid down as fundamental:—1. To commence with giving the pupil distinct ideas of hill, valley, plain, stream, and lake in his own circle, and the characteristics of his own neighborhood; and thus to become familiar with the elements, and to proceed from particular to general views. 2. That the geography of their native country should be made familiar to the pupils of the common school, before they are confused or attracted by the peculiarities and wonders of foreign countries. A course of instruction was described for the canton of Berne in conformity with these principles, and the necessary references given to the authorities from which the teacher should derive his information. As a part of the course, each teacher was required to write an account of the place of his residence; and was taught how he should direct his pupils in the observations and inquiries necessary for this purpose, and fitted to develop the habits of quick and accurate perception and patient research.

History of Switzerland.—It was assumed as a principle, that history should not be taught *as a whole* in common schools; because young minds are incapable of understanding the causes and connection of events which involve the ideas, and plans, and motives of warriors and statesmen. On the other hand it was deemed of great importance to present the *leading events* of history to the young, in order to impress the moral lessons which they furnish, and especially those which belong to their own country. To the teachers, however, it was considered necessary to give a complete view of the history of Switzerland, in order to enable them to select and explain better its individual portions. It was accordingly narrated, so far as the time would admit, in several great divisions: the primitive period, the Roman period, and the period of transition, introduced the Swiss confederation; the heroic or warlike period, the period of political decline, and the period of revolution, (since 1798.) embraced the history of the confederation. This view of the course will be sufficient to show the general principles on which the method of instruction in this subject is founded.

Agriculture.—A course of lectures on agriculture was given to the assembled teachers by Fellenberg himself. The audience were reminded of that wise Omnipotence which presides over the circle of human activity, and of the manner in which it operates incessantly to prepare man for his higher destination, by rendering all his efforts dependent on this parental guidance for their success; and by leading him through all the variety of events in the material world, to that higher moral existence for which we are made. The lecturer pointed out the wisdom of this arrangement, and the defects which would exist in our education, as men, without these external means. He stated that he had assumed it as a part of his task to illustrate, by the evidence of facts, in a rational system of agriculture, that man is called upon to become like God—in governing himself, and in controlling the material world, for the good of his fellowmen; and that he observed constantly more and more the powerful influence of well-conducted plans of agriculture exerted in counteracting the spirit of indolence and habits of idleness. The first subject illustrated, was the power which a knowledge of the great principles of agriculture confers over the operations of nature, by giving a suitable direction to the cares and labors of its possessor; and the wretched slavery of the ignorant to the mere changes of matter, and to those effects of the elements which

the Creator gives us the capacity in some measure to employ for our own benefit. He next considered the best mode of rendering agriculture a means of exciting mental activity in the children and parents of a village, and of forming their character. Many sources of poverty and suffering in Switzerland were pointed out, which arose from the neglect of this subject, and the intimate connection between the improvement of agriculture, and the increase of intelligence and comfort of those who are engaged in it, with the prosperity and the free institutions of the country. Various leading principles of agriculture were then taken up; such as the removal of all the obstacles to vegetation—stones, weeds, excessive water, &c.; the rational preparation and use of manure; the proper form and employment of the plough; and the succession of crops. The influence of these principles, and of the knowledge of the elements that compose the materials employed in cultivating the earth, on the products and the facility of labor, were clearly exhibited, and were illustrated by a reference to the improved fields and increased products of Hofwyl. In short, the great object of this course was, not to teach the science, but to give such general views as should lead the teachers to appreciate and inculcate its importance, to observe and reflect on the prevailing evils and their remedies, and to excite their pupils to observation, as a means of rendering their very labors a source of intellectual and moral improvement.

A brief course of instruction was also given by Fellenberg, *on the constitution of the canton, and the rights and duties of citizens.* It would, of course, be out of place to enter into the details of the Berne constitution; but we can not give a correct view of the spirit of this course of instruction without describing the peculiar manner in which he introduced it.

He observed that the merely material interest of civil and political life forms a foundation too sandy and unstable for the life of the family or the state. A constitution truly free, and fitted to promote the higher moral ends of our existence, can find no firmer basis, no more noble and appropriate means, no higher ends, than in the message of 'peace on earth, and good will to men,' which was brought by our Savior. No book of freedom can better satisfy its true friends than the Bible, with its evangelical complement, if its instructions and its objects are rightly understood. Since I have sought here the sources and objects of a constitution, I have felt a higher value than ever for the Scriptures. The constitution presents the good of all as the great object; and this is the end of the Divine government. It calls upon each citizen to live and die for others—the object of our Savior's instructions and example. The Creator makes no distinction in the birth and death of men; and the constitution only follows his example in giving equal rights to all. The Savior teaches us to regard our fellow-men as members of the same family; the constitution simply enforces and carries out this principle. It acknowledges that 'the welfare or misery of a state depends on the moral and intellectual cultivation of its citizens, and that their sound education is among its first duties, and thus admits the great principle of the Gospel in relation to the affairs of this world.' Such is the spirit which Fellenberg wishes to pervade every course of instruction."

The success of the Normal course of instruction at Hofwyl, in spite of the petty jealousy with which the patriotic and benevolent labors of its founder was followed by the government of Berne, led to the establishment of two Normal Schools in that canton, and of similar institutions in most of the cantons of Switzerland. Fellenberg was elected a member of the Legislative Assembly, on the adoption of the new constitution, in 1831. On his motion the following article was introduced into the fundamental law:

"The welfare or woe of every state depends on the moral worth of its citizens. Without the cultivation of the mind and heart, true freedom is inconceivable, and patriotism is an empty sound. We must labor for our moral elevation, for the highest possible cultivation of the powers we have received from the Creator, if we would partake of the happiness which a free constitution should afford. The zealous promotion of this object is recommended by the Constituent Assembly to all future legislators, as holding a higher place in importance than all other objects."

Although the teachers of the canton were prohibited by a vote of the Education Department of the canton from attending his Annual Normal Course, a society was formed in 1832, with the name of the "*Cantonal Teachers' Society of Berne.*" The following account is given by Mr. Woodbridge, in 1834:

BERNE CANTONAL SOCIETY OF TEACHERS.

"This society was formed by the teachers assembled for instruction at Hofwyl in the summer of 1832, and consisted of 154 members, with few exceptions, teachers of ordinary schools. Fellenberg was chosen president; and Vehrli, the excellent teacher of the farm pupils of Hofwyl, vice-president. Its constitution presents, as the great objects of the society, union and co-operation in promoting the education of the people, and elevating the character of the schools. The means proposed were, free communications between its members, consultations concerning the best modes of advancing the cause of schools and improving the condition of teachers, and direct efforts to excite the attention of the people to the defects of present plans and methods of organizing and instructing the common schools of the country.

Among the important topics in the school itself which are proposed by the Society of Berne, to be presented in the meetings of its auxiliary societies, the first named is a careful inquiry into the condition of the pupils of their schools, and the proper means for their moral improvement. For this purpose they urge that every effort be made to give the pupils *constant employment*, and to guard them against the temptations of idleness; to preserve a mild but firm course of discipline; and to promote *fraternal affection* among them. They urge, that every branch of instruction, from the highest to the lowest, be discussed at these meetings; and that there should be a steady effort among the teachers to *advance in knowledge and skill.* Would that the last object could be impressed upon the minds of the multitude of teachers in our country, who wrap themselves up in the consciousness of having attained the *ne plus ultra* of skill and knowledge, or lie down in listless apathy, after their daily task is performed, with no anxiety but to 'get through' the business of to-morrow as early as possible.

The second meeting of the Berne Society of Teachers was also held at Hofwyl. It was opened by an interesting address from the president, full of truth and energy, of which we can only give a few opening sentences:—

'Guardians of the spiritual life, the personal wealth, of the children of our people! we have assembled to ratify our bond. We have pledged ourselves that in our schools shall grow up a noble, well-taught generation of the people; true to the principles of the Gospel, devoted to God, and faithful to men; a people whose characters shall not be unworthy of the scenes of grandeur and beauty which the Creator has assigned as their native land!'

'In this great object we shall succeed only so far as we follow the Savior's example, and imbibe the fullness of his love to man, and trust in God, in forming the hearts of those who are committed to us, in extending the influence of the school to every household, and in warming the hearts

of parents as well as children. God will reward such labors, even if they are not rewarded on earth. The God who feeds the ravens and clothes the lilies, will never forsake the faithful guardians of *his* children.'

Among the evils suggested at this meeting of the society, as requiring a remedy, were some familiar to our own schools:—the want of faithful visitation, for which responsible and *paid* officers were considered the only remedy; neglect and difficulties in obtaining suitable teachers; imperfect school-books and means of instruction; the want of a periodical for teachers; the unhappy difficulties arising from the dependence of the teacher on the caprice or convenience of individuals for his scanty pay, and claims of parental dictation often founded upon it.

After the meeting was closed the band of music of the farm pupils of Hofwyl called the assembly to a repast prepared for 360 persons by the liberal founder of Hofwyl. It was opened by him with prayer, acknowledging the favor of God to their association, and intreating his blessing upon their future efforts. A scene of social enjoyment and familiar intercourse then followed, suited to cheer the hearts of these fellow-laborers in an arduous and too often thankless office. Occasional songs, of that elevated and heart-stirring character which we have formerly described. were sung by the farm pupils, and united in by the chorus of teachers. We translate one sentiment given by a teacher, as a specimen of those offered on this occasion:

'There is *one means* of making the happiness, and the delight, which we feel to-day, *universal!* There is one *unfailing means* to convert ruined families into families of joy—to dry up the sources of poverty and misery—and to stem the torrent of overwhelming vice—to secure our liberties, and those of our children, against all the power of treachery,—in short, to secure the purity and the happiness of the people. And this unfailing means is, CHRISTIAN RATIONAL EDUCATION OF THE PEOPLE, and especially of the poor. *To all, then, who understand this mighty cry, and put their hands to the holy work,* LONG LIFE! HEALTH *to all the friends and promoters of rational education of the people, and the poor—far and near!* LONG LIFE TO THEM!'

Such animating sentiments were followed and impressed by some of the noble 'männenchëren,' or hymns for male voices, which the Swiss music furnishes to cherish social, and benevolent, and patriotic, and devotional feeling, in place of the bacchanalian and amatory songs which so often disgrace our social meetings.

During the summer of 1833, a course of instruction was given to teachers, under the immediate direction of Fellenberg. It was closed by an examination, at which a considerable number of persons were present; and the Cantonal Society of Teachers held its third meeting immediately after. It was attended by 200 teachers and friends of education, or *schoolmen*, as they are all styled in simple German, many of whom were new members.

Would that we could witness such a movement in any considerable portion of our own country. Could we see some individual who had the faith to invite, and the influence necessary to collect such a body of teachers to listen to instruction, and consult for the good of their schools, for three months, in any State in the Union, we should expect more benefit to the cause of education than from any amount of school funds; for, important as they are, under proper regulation, they can never supply the place of an intelligent and well-trained body of teachers.

Since the above letter was written, State, County and Town Associations of Teachers have been formed; Teachers' Institutes have been held; and Normal courses of instruction and Normal Schools, established.

NORMAL SCHOOL

AT

KUSSNACHT, IN THE CANTON OF ZURICH.

The Normal School at Kussnacht is about a league from the town of Zurich, and the buildings are prettily situated on the borders of the lake of the same name. This institution was re-organized in 1836, though the modifications made have been rather in the details than in the general principles. It now consists of a school for teachers, a preparatory school for this seminary, and three primary model schools. It is intended to supply teachers for the different grades of primary schools of the canton, and during a portion of the year lectures are also delivered in the seminary to the older teachers, who are assembled for the purpose in their vacations.

The superintendence and control of the Normal School is vested by the legislative council in the council of education, who appoint a committee of superintendence from their own body. This committee visits the school at least once a month, attends its examinations, and, in general, inspects its management. The executive power is delegated to a director, who has the immediate charge of the school, and arranges the plan of instruction, in subordination to the council of education. He examines the candidates for admission, inspects the classes of the seminary, and of the schools attached to it, and lectures in the school of repetition for the older teachers. He is also responsible for the discipline, and reports half-yearly the state of the institution to the council of education. He is moreover present at the meeting of the committee of superintendence. There are three other teachers, besides a variable number of assistants. These teachers in turn have charge of the pupils of the Normal School in and out of school-hours. There are conferences of all the teachers, at which the director presides. The manners of the people and the purpose of the seminary render the discipline of very trifling amount. The pupils of the Normal School reside in the village of Kussnacht, but spend the greater part of their time at the school, under the direction of its masters. All the time devoted to study, recitation or lecture, and regular exercise, is passed there.

To be admitted as a candidate for the Normal School, a youth must be sixteen years of age, and of suitable morals, intellectual, and physical qualities for the profession of a teacher. He must have spent two years in the higher division of primary instruction (called here secondary) in the model school, or some equivalent one, or have passed through the preparatory department of the Normal School, which gives a preference to the candidate, other qualifications being equal. The examination of candidates takes place once a year, and in presence of the committee of superintendence, or of a deputation from their body. The formal right of admitting to the school is, however, vested alone in the council of education. The subjects of examination are Bible history, speaking and reading, grammar, the elements of history, geography and natural philosophy, arithmetic and the elements of geometry, writing, drawing, and vocal music. The council of education fixes the number of pupils who may be admitted, and the most proficient of the candidates are selected. There are forty stipendiary places, ten of the value of one hundred and sixty Swiss francs, (forty-eight dollars,) and thirty of half that sum.

Natives who are admitted all receive their instruction gratis. If there is room in the school, foreigners may be received, paying twelve dollars per annum for their instruction. The number of pupils at the date of my visit, in the autumn of 1837, was one hundred and ten. The stipendiaries are bound to serve as teachers in the canton two years; a very moderate return for the education received.

There are two grades of courses in the Normal School, one of two years for pupils intending to become teachers in the lower primary schools, the other of three years for the higher primary schools. The courses begin in April, and continue, with seven weeks of vacation, throughout the year. The subjects of instruction are: Religious instruction, German, French, mathematics, history, geography, natural history and philosophy, pedagogy, writing, drawing, and vocal and instrumental music. French is only obligatory upon the students of the three years' course. Gymnastic exercises and swimming are regularly taught and practised.

There is, besides, a lecture of an hour and a half on the art of building, once a week, attended by all the students. Those who learn instrumental music have lessons two hours and a half every week, and two hours on Sunday are occupied with singing in concert. One of the teachers devotes two extra hours every week to the assistance of some of the pupils in their studies, or to repetitions.

At the close of each year there is a public examination, and the pupils are classed according to its results. On leaving the institution, they are arranged in three grades; the first, of those who have gone very satisfactorily through the school, the second, of those who have passed satisfactorily, and the third, of those who have not come up to the standard. Certificates of the first two grades entitle their holders to compete for any vacant primary school.

The courses of practice begin in the second year, when the pupils take regular part in the exercises of the schools attached to the seminary. These are, first, two model schools for children from the ages of six to nine, and from nine to twelve, at which latter age the legal obligation to attend the school ceases. The third, called a secondary school, contains pupils from twelve to sixteen years of age. The system of instruction used in the lower schools is attended with very striking results. The lessons are not divided into distinct branches, studiously kept separate, as in most elementary schools, but are connected, as far as possible, so as to keep the different subjects constantly before the mind. Thus, a lesson of geography is, at the same time, one of history, and incidentally of grammar, natural history, of reading and writing, and so on through the circle of elementary instruction. The Pestalozzian lessons on form are made the basis of writing, and with good success. The lowest class is taught to speak correctly, and to spell by the phonic method, to divide words into syllables, and thus to count. To number the lessons. To make forms and combine them, and thus to write, and through writing to read. The second passes to practical grammar, continues its reading and writing, the lessons in which are made exercises of natural history and grammar. Reading and speaking are combined to produce accuracy in the latter, which is a difficulty where the language has been corrupted into a dialect, as the German has in northern Switzerland. Movable letters are used to give exercises in spelling and reading. The plan of the Pestalozzian exercises in grammar is followed, and when the pupils have learned to write, a whole class, or even two classes, may be kept employed intellectually, as well as mechanically, by one teacher. In reading, the understanding of every thing read is insisted upon, and the class-books are graduated accordingly. I never saw more intelligence and readiness displayed by children than in all these exercises; it affords a

strong contrast to the dullness of schools in which they are taught mechanically. The same principles are carried into the upper classes, and are transplanted into the schools by the young teachers, who act here as assistants. The examination of the second school in Bible history, with its connected geography and grammar lessons; in composition, with special reference to orthography and to the hand-writing; and the music lesson, at all of which the director was so kind as to enable me to be present, were highly creditable.

There are three classes in each of these schools, and the pupils of the Normal Seminary practice as assistant teachers in them at certain periods; the director also gives lessons, which the pupils of the seminary repeat in his presence.

In the highest, or secondary school, the elementary courses are extended, and mathematics and French are added.

The pupils of the preparatory department of the seminary spend two years in teaching in the two model schools, and in receiving instruction in the "secondary school" under the special charge of the director of the seminary. This establishment has furnished, during three years of full activity, two hundred teachers to the cantonal primary schools. These young teachers replace the older ones, who are found by the courses of repetition not able to come up to the present state of instruction, and who receive a retiring pension. The schools must thus be rapidly regenerated throughout the canton, and the education of the people raised to the standard of their wants as republicans.

PLAN OF INSTRUCTION

PURSUED IN THE THREE COURSES, AT THE NORMAL SEMINARY AT LUCERN, SWITZERLAND.

HOURS.	MONDAY.		TUESDAY.		WEDNESDAY.		THURSDAY.		FRIDAY.		SATURDAY.	
	1st course,	2d and 3d course,	1st and 2d course,	3d course,	1st course,	2d and 3d course,	1st and 2d course,	3d course,			1st and 2d course,	3d course.
8 to 9, or ½ past 9,	Arithmetic,	Grammar and school discipline,	Religious instruction,	Writing,	Geometry,	Composition,	Religious instruction,	Writing,	Same as	Monday,	Religious instruction,	Geometry.
9, or ½ past 9, to 10 or 11,	Grammar and school discipline,	Arithmetic,	Grammar,	Religious instruction,	Composition,	Geometry,	Writing,	Religious instruction,	. .	. .	Grammar,	Religious instruction.
			1st course,	2d and 3d course,			1st course,	2d and 3d course,				
10 to 11,	. .	. .	Geometry,	Composition,	. .	. .	Composition,	Arithmetic,	. .	. .	Arithmetic,	Statistics of Switzerland. 2d and 3d course.
11 to 12,	. .	Singing,	Singing,	. .	. .	Singing,	Singing,	. .	. .	. .	. .	Singing.
	1st course,	2d and 3d course,	1st course,	2d and 3d course,	1st course,	2d and 3d course,	1st, 2d, and 3d course,		1st course,	2d and 3d course,	1st course,	2d and 3d course.
½ past 1 to 3,	Art of teaching,	Geometry,	History,	Arithmetic,	. .	. .	Drawing,		Art of teaching,	Arithmetic,	History,	Geometry.
3 to 4,	Arithmetic,	Natural philosophy or history,	Writing,	Natural philosophy,	. .	. .			Arithmetic,	School discipline,	Arithmetic,	Natural philosophy or history.
6 to 7,	Gymnastics,	Geography,	Geography,	Gymnastics,	. .	Geography,	Geography,	Gymnastics,	Gymnastics,	Geography,	Geography,	Gymnastics.

COURSE OF INSTRUCTION

PURSUED IN THE NORMAL SEMINARY AT ZURICH, SWITZERLAND.

	1st Class and 1st School year.		2nd Class and 2nd School year.		3d Class and 3d School year.	
	1st Half year.	2nd Half year.	1st Half year.	2nd Half year.	1st Half year.	2nd Half year.
Religion and Morals.	Geography of Palestine, Jewish Archæology, History of the Christian Church.	Faith and morals, as founded on revelation.	Lectures on the Bible, with questions.	Lectures on the Bible, with practical illustrations and references.	Deeper and more abstruse points of doctrine, with scriptural proofs and practical illustrations.	Continuation of the above.
German Language.	Grammar, exercises in reading and recitations, composition.	Grammar, continuation of exercises in reading and recitations, composition of letters and speeches.	Etymology, and logical exercises, recitations, and composition.	Repetitions of the more difficult parts of grammar, more extended compositions, laws of poetry.	The more important peculiarities of the German language, verbal expositions of the written exercises.	View of German literature: poetical exercises.
French Language.	Exercises in reading, and translation of easy pieces of French into German, introduction to the grammar, and etymology.	Continuation of the above beginning of the translation of German into French: grammar: vocabulary.	Continued exercises of reading and transl. into German: grammar: syntax: trans. from German into French: speaking.	Continuation of exercises in reading and translation: conclusion of syntax: recitations of easy pieces.	Further expositions of grammar, more difficult translations from & into French and German respectively: composition.	Continuation of the above short sketch of French literature.
Arithmetic.	Elementary rules of arithmetic, Vulgar and Decimal Fractions.	Proportion: mental arithmetic.	Continuation of exercises in the elementary rules.	Continuation of exercises in Proportion: Simple Equations.	More difficult applications of the preceding rules.	Quadratic and Cubic Equations: Logarithisms, Properties of Numbers: Progression.
Geometry.	The doctrine of parallel lines, properties of triangles, similar triangles.	Measurement of triangles, and straight line figures, planimetry.	Further exposition of the properties of triangles, and of straight line figures.	The circle: elements of stereometry: easy questions in practical geometry.	Continuation of planimetry: plain and solid angles: projection of straight line figures: questions in the above subjects.	Polygonal figures: elements of trigonometry: practical geometry: projection of bodies with straight or curved surfaces: sections.
History.	History from the beginning of the world to the subjection of Greece to the Romans.	From the building of Rome to the Westphalian Peace.	History of Switzerland from the beginning to the Westphalian Peace.	History of Switzerland as it bears on that of the rest of the world to the present period.	General history from 1389 to 1815.	General history from 1815 to the present time.

Geography.	Introductory explanations, the ocean and continents, with their respective divisions.	Special geography of Europe.	The most important points of mathematical and physical geography.	Geography of Asia, Africa, America, and Australia.	More extended expositions of mathematical and physical geography.	Special geography of Asia, Africa, America, and Australia.
Natural History.	General introduction to natural history, description of elementary bodies, general characteristics of minerals.	Unmetallic minerals, metals, mountains, introduction to botany.	Systems of botany, description of plants, special information on the plants known to the pupils.	Introduction to zoology: classification and descriptions, introduction to the natural history of man.	Natural history of man: further expositions of the natural history of the lower animals.	Introduction to geology: fossils.
Physics.	: :	: :	The common phenomena arising from the various properties of differently constituted bodies.	Acoustics, optics, heat, magnetism, electricity.	Further exposition of the above subjects.	Further exposition of the above subjects.
Singing.	Elementary exercises of the voice, easy choral exercises.	Melody, religious hymns and choral singing.	Further exercises in Sol Fa, also with words, exercises in solo singing and choral singing.	Continuation of the above, special exposition of the art of teaching music.	Continuation of the above.	Continuation of the above.
Art of Writing.	Exercises in German and Roman character, in legal writing, and in black letter writing, music, and stenography.				: :	: :
Drawing.	Sketches from objects placed before the pupil, and from nature; special exercises in shading.				: :	: :
Art of Teaching.	: :	: :	Introduction to psychology, methods of instruction.	Further exposition of methods of instruction, and of the cantonal laws and regulations relative to schools, practical teaching in the primary school.	Fundamental principles of the science of teaching.	Practical teaching in the secondary school.

COURSE OF INSTRUCTION

IN THE NORMAL SCHOOL OF THE CANTON OF VAUD, AT LAUSANNE, DURING THE WINTER OF 1838—1839.

HOURS.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
8	Prayer, reading, and religious instruction (all,)	As on Monday,	Idem,	Idem,	Idem,	Idem.
9	The art of teaching (all,)	General history (all,)	The art of teaching (all,)	Use of globes, first and second classes,	Swiss history (all,)	Instruction in law and in the duties of a citizen, 1, 2, 3.
10	Geometry, 1, 2, The means of improving the health and condition of the people,	Arithmetic, 1, 2, Theme, 3,	Theme, 1, 2, Arithmetic, 3,	Composition, 1, 2, Mental arithmetic, 3,	Arithmetic, 1, 2, Theme, 3,	Theme, 1, 2. Arithmetic, 3.
11	Botany, 1, 2,	Writing, 1, 2, 3,	Chemistry, then Zoology, 1, 2, 3,	Chemistry, then Zoology, 1, 2, 3,	Writing, 1, 2, 3,	Chemistry, &c. 1, 2, 3.
1	. .	. .	. .	. .	Exercises on the physical sciences, 1, 2,	Writing, 3.
2	Grammar, 1, 2, 3,	Drawing, 1, 2; reading, 3,	Grammar, 1, 2, 3,	Drawing, 3; mental arithmetic, 1, 2,	Geometry, 3, Composition, 1, 2,	Geometry, 1, 2.
3	Gymnastics, 1, 2,	Drawing, 1, 2,	Gymnastics, 3, Book-keeping, 1,	Drawing, 3; reading, 1, 2,	Pedagogical exercises in mathematics, 1, 2,	. .
4	Geography, 3,	Geography, 1, 2,	Reading, 1, 2, Geometry, 3,	Reading, 3,	Swiss Geography, 1, 2, 3,	. .
5	. .	Geography, 3,	. .	Geography, 1, 2,	. .	. .
7	. .	Singing, 3,	Singing, 1, 2, 3,	Singing, 1, 2,	Singing, 1, 2, 3,	. .

N. B.—The figures denote the different classes. The figure 1 being attached to the most advanced class.

COURSE OF INSTRUCTION

IN THE NORMAL SCHOOL OF THE CANTON OF VAUD AT LAUSANNE, IN THE SUMMER OF 1838.

HOURS.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
5	. . .	Book-keeping (teachers,)* Writing (pupils,)†	Geography (teachers,)	Geography (teachers,) Writing (pupils,)	. . .	On the method of writing (teachers.)
6	Prayer, reading, and religious instruction,	As on Monday,	As on Monday,	As on Monday,	As on Monday,	As on Monday.
7	Composition (older pupils,) Arithmetic, (younger pupils,)	Arithmetic (teachers,) A theme (pupils,)	Composition (teachers,) Geometry (pupils,)	Arithmetic (teachers,) A theme (pupils,)	Composition (teachers,) Geometry (pupils,)	Arithmetic (teachers.) Composition (young pupils.)
8	. . .	. . .	. . .	. . .	. . .	. . .
9	The art of teaching (all,)	Use of the globes (all,)	Art of teaching (all,)	Instruction in the law and duties of a citizen (all,)	Art of teaching (all,)	Instruction in the law and in the duties of a citizen (all.)
10	Geography (teachers,) Mental arithmetic (pupils,)	Grammar (teachers,) Geography (pupils,)	Geometry (teachers,) Grammar (pupils,)	Reading, with analysis of the grammar, structure, and meaning (all,)	Grammar (teachers,) Geography (pupils,)	Geometry (teachers.) Grammar (pupils.)
11	Natural history (all,)	Physics (pupils,)	Natural history (all,)	Natural history (all,)	Pedagogical exercises on the physical sciences (pupils,)	Reading (teachers.) Arithmetic (older pupils.)
2	A theme (teachers,)	Drawing (teachers,) Composition (young pupils,)	A theme (teachers,)	Drawing (pupils,)	. . .	. . .
3	Gymnastics (pupils,)	Drawing (teachers,) Composition (young pupils,)	Geography of Switzerland (teachers,)	Drawing (pupils,)	Gymnastics (pupils,)	. . .
4	Reading (pupils,)	Reading (all,)	Singing (teachers,) Arithmetic (pupils,)	Reading (all,)	Singing (teachers,) Arithmetic (pupils,)	Practical geometry (pupils.)
5	Mental Arithmetic, (teachers,)	Singing (all,)	Singing (pupils,)	Singing (all,)	Singing (pupils,)	. . .

* Teachers are masters of elementary schools in attendance on the Normal School.

† Pupils are young men who have not had charge of elementary schools, but who are preparing for the duties of schoolmasters.

COURSE OF INSTRUCTION

PURSUED AT THE NORMAL SEMINARY IN THE CANTON OF THURGOVIA, SWITZERLAND, UNDER THE SUPERINTENDENCE OF M. VEHRLI, IN THE SUMMER HALF YEAR OF 1839.

HOURS.	CLASS.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.	SUNDAY.
5 to 7	First .	Out-door labor,	Out-door labor,	Art of teaching,	Out-door labor,	Out-door labor,	Art of teaching.	Attending divine service, sacred music, teaching in Sunday school.
	Second.	Out-door labor,	Out-door labor,	Out-door labor,	Art of teaching,	Out-door labor,	Out-door labor.	
7 to 8	..	Breakfast,	Breakfast,	Breakfast,	Breakfast,	Breakfast,	Breakfast.	
8 to 9	First .	Natural history,	Biblical history,	Profane history,	Natural history,	Biblical history,	Profane history.	
	Second.	Profane history,	Biblical history,	Management of land,	Profane history,	Biblical history,	Management of land.	
9 to 10	First .	Grammar,	Grammar,	Natural history,	Grammar,	Grammar,	Natural history.	
	Second.	Geometry,	Arithmetic,	Grammar,	Geometry,	Arithmetic,	Grammar.	
10 to 11	First .	Singing,	Singing,	Grammar,	Singing,	Singing,	Grammar.	
	Second.	Grammar,	Grammar,	Geometry,	Grammar,	Grammar,	Geometry.	
11 to 12	First .	Arithmetic,	Geometry,	Geometry,	Arithmetic,	Geometry,	Arithmetic.	
	Second.	Natural history,	Natural history,	Art of teaching,	Natural history,	Natural history,	Art of teaching.	
12 to 1½	..	Dinner and gymnastic exercises,	Dinner and gymnastic exercises,	Dinner and gymnastic exercises,	Dinner and gymnastic exercises,	Dinner and gymnastic exercises,	Dinner and gymnastic exercises.	
1½ to 3	First .	Singing,	Writing,	Drawing,	Singing,	Writing,	Drawing.	
	Second.	Writing,	Drawing,	Violin,	Drawing,	Singing,	. . .	
3 to 4	First .	Geography,	Arithmetic,	Arithmetic,	Geography,	Arithmetic,	Writing.	
	Second.	Arithmetic,	Geography,	Natural history,	Arithmetic,	Geography,	. . .	
4 to 5	First .	Geometry,	Reading,	Repetitions,	Geometry,	Reading,	. . .	
	Second.	Reading,	Geometry,	Arithmetic,	Reading,	Geometry,	. . .	
5 to 6	..	Supper,	Supper,	Supper,	Supper,	Supper,	Supper.	
6 to 9	..	Garden-work, housework, conversation,	Garden-work, housework, conversation,	Garden-work, housework, conversation,	Garden-work, housework, conversation,	Garden-work, housework, conversation,	Garden-work, housework, conversation.	

IX. STATE NORMAL SCHOOL OF NEW YORK, AT ALBANY.

The State Normal School at Albany, was established by an Act of the Legislature of New York in 1844, "for the instruction and practice of Teachers of Common Schools, in the science of Education and the Art of Teaching." Like similar institutions in other states and countries, it originated in the demand of the more advanced teachers, educators, and statesmen, for opportunities of special preparation as a pre-requisite for the delicate and difficult work of a schoolmaster.

HISTORICAL DEVELOPMENT.

Among the earliest and most earnest advocates of legislative provision for the professional training of teachers, stands the name of Governor De Wit Clinton. In his message to the Legislature in 1825, he recommends "to their consideration, the education of competent teachers;" and in 1826, he again adverts to the subject in the following language:

"Our system of instruction, with all its numerous benefits, is still, however, susceptible of improvement. Ten years of the life of a child may now be spent in a common school. In two years the elements of instruction may be acquired, and the remaining eight years must either be spent in repetition or idleness, unless the teachers of common schools are competent to instruct in the higher branches of knowledge. The outlines of geography, algebra, mineralogy, agricultural chemistry, mechanical philosophy, surveying, geometry, astronomy, political economy and ethics, might be communicated in that period of time, by able preceptors, without essential inteference with the calls of domestic industry. The vocation of a teacher in its influence on the character and destiny of the rising and all future generations, has either not been fully understood, or duly estimated. It is, or ought to be, ranked among the learned professions. With a full admission of the merits of several who now officiate in that capacity, still it must be conceded that the information of many of the instructors of our common schools does not extend beyond rudimental education; that our expanding population requires constant accession to their numbers; and that to realize these views, it is necessary that some new plan for obtaining able teachers should be devised. I therefore recommend a seminary for the education of teachers in those useful branches of knowledge which are proper to engraft on elementary attainments. A compliance with this recommendation will have the most benign influence on individual happiness and social prosperity."

And again, in his message in 1828, Governor Clinton urges the subject on the attention of the Legislature.

"It may be taken for granted, that the education of the body of the people can never attain the requisite perfection without competent instructors, well acquainted with the outlines of literature and the elements of science." He recommends with this view, "a law authorizing the supervisors of each county to raise a sum not exceeding $2000, provided

that the same sum is subscribed by individuals, for the erection of a suitable edifice for a Monitorial High School, in the county town. I can conceive of no reasonable objection to the adoption of a measure so well calculated to raise the character of our school masters, and to double the powers of our artizans by giving them a scientific education."

In 1826, Hon. John C. Spencer, from the Literature Committee of the Senate, to whom the message of Governor Clinton for that year had been referred, made a report, recommending among other plans for the improvement of common schools, that the income of the "Literature Fund" be divided among the academies of the State, *not* in reference to the number of *classical students* in each, but "to the number of persons instructed in each, who shall have been licensed as teachers of common schools by a proper board." He thus introduces the subject:

"In the view which the committee have taken, our great reliance for nurseries of teachers must be placed on our colleges and academies. If they do not answer this purpose, they can be of very little use. That they have not hitherto been more extensively useful in that respect is owing to inherent defects in the system of studies pursued there. When the heads of our colleges are apprised of the great want of teachers which it is so completely in their power to relieve, if not supply, it is but reasonable to expect that they will adopt a system by which young men whose pursuits do not require a knowledge of classics, may avail themselves of the talent and instruction in those institutions, suited to their wants, without being compelled also to receive that which they do not want, and for which they have neither time nor money."

"In 1827, Mr. Spencer, from the same Committee, reported a bill entitled 'An act to provide permanent funds for the annual appropriation to common schools, to increase the Literature Fund, and to promote the education of teachers,' by which the sum of $150,000 was added to the Literature Fund. And the Regents of the University were required annually to distribute the whole income of this fund among the several incorporated academies and seminaries, which then were or might thereafter become subject to their visitation, 'in proportion to the number of pupils instructed in each academy or seminary for six months during the preceding year, who shall have pursued classical studies, or the higher branches of English education, or both.' In the report accompanying this bill, which, on the 13th of April, became a law, the committee expressly observe, that their object in thus increasing this fund is 'to promote the education of young men in those studies which will prepare them for the business of instruction, which it is hoped may be accomplished to some extent, by offering inducements to the trustees of academies to educate pupils of that description.' 'In vain will you have established a system of instruction; in vain will you appropriate money to educate the children of the poor, if you do not provide persons competent to execute your system, and to teach the pupils collected in the schools. And every citizen who has paid attention to it and become acquainted practically with the situation of our schools, knows that the incompetency of the great mass of teachers is a radical defect which impedes the whole system, frustrates the benevolent designs of the Legislature, and defeats the hopes and wishes of all who feel an interest in disseminating the blessings of education.' 'Having undertaken a system of public instruction, it is the solemn duty of the Legislature to make that system as perfect as possible. We have no right to trifle with

the funds of our constituents, by applying them in a mode which fails to attain the intended object. Competent teachers of common schools must be provided; the academies of the State furnish the means of making that provision. There are funds which may be safely and properly applied to that object, and if there were none, a more just, patriotic, and in its true sense, popular reason for taxation cannot be urged. Let us aid the efforts of meritorious citizens who have devoted large portions of their means to the rearing of academies; let us reward them by giving success to their efforts; let us sustain seminaries that are falling into decay; let us revive the drooping and animate the prosperous, by cheering rays of public beneficence; and thus let us provide nurseries for the education of our children, and for the instruction of teachers who will expand and widen and deepen the great stream of education, until it shall reach our remotest borders, and prepare our posterity for the maintenance of the glory and prosperity of their country.'"

The legal provision for the better education of teachers rested on this basis until 1834, when an act was passed, by which the surplus income of the Literature Fund over twelve thousand dollars was placed at the disposal of the Regents of the University, to be by them distributed to such academies, subject to their visitation as they might select, and to be *exclusively devoted to the education of teachers for the common schools*, in such manner and under such regulations as they might prescribe.

In pursuance of the provisions of the act of 2d of May, 1834, authorizing the Regents of the University to apply a part of the income to the Literature Fund to the education of common school teachers, a plan was reported on the 8th of January, 1835, by Gen. Dix, from the committee appointed for that purpose, to the Regents with the view of carrying into effect the intention of the act. This plan was approved and adopted by the Regents; and one academy was selected in each of the eight Senate districts, charged with the establishment of a Department specially adapted to the instruction of teachers of common schools. To support these departments, each academy received from the Literature Fund, a sufficient sum to procure the necessary apparatus for the illustration of the various branches required to be taught; the sum of $191 to be appropriated to the enlargement of the academical library; and an annual appropriation of $400 to meet the increased expense which might devolve upon the institution in consequence of the establishment of the teachers' department.

In his annual Report for 1836, the Superintendent (Gen. Dix,) again adverts to the fact, that in the adoption of this system 'the Legislature has merely provided for the more complete execution of a design long entertained. so far as respects the employment of the academies for this purpose. The propriety of founding separate institutions," he continues, 'upon the model of the seminaries for teachers in Prussia, was for several years a subject of public discussion in this State. It was contended, on the one hand, that such institutions would be more likely to secure the object in view; and on the other, that it might be as effectually and more readily accomplished through the organized academies.' After again referring to the act of April 13, 1827, he concludes:

"Thus although the plan of engrafting upon the academies, departments for the preparation of teachers, may not have been contemplated at the time, yet this measure is to be regarded only as a more complete development of the design of the Legislature in passing the act referred to."

"By the 8th section of the act of April 17, 1838, appropriating the income of the United States Deposite Fund to the purposes of education,

&c. the sum of $28,000 was directed to be annually paid over to the Literature Fund, and apportioned among the several academies of the State; and by the 9th section, it was made the duty of the Regents of the University 'to require every academy receiving a distributive share of public money, under the preceding section equal to seven hundred dollars per annum, to establish and maintain in such academy, a department for the instruction of common school teachers, under the direction of the said Regents, as a condition of receiving the distributive share of every such academy.' Under this provision eight academies, in addition to those designated specially for this purpose by the Regents, established departments for the education of teachers.

Desirous of knowing the practical operation of the departments thus organized, the superintendent (Mr. SPENCER) during the summer of 1840, commissioned the Rev. Dr. Potter of Union College, and D. H. Little, Esq. of Cherry-Valley, to visit these institutions, and report the result of their examinations to the department, accompanied by such suggestions as they might deem expedient. Prof. Potter in his report, after enumerating the various advantages and defects which had presented themselves to his observation in the course of his examination, observes in conclusion:

'The principal evil connected with our present means of training teachers, is, that they contribute to supply instructors for *select* rather than for common schools; and that for want of special exercises, they perform even that work imperfectly. I would suggest whether some means might not be adopted for training a class of teachers, with more especial reference to country common schools, and to primary schools in villages and cities; teachers whose attainments should not extend much beyond the common English branches, but whose minds should be awakened by proper influence; who should be made familiar by practice with the best modes of teaching; and who should come under strong obligations to teach for at least two or three years. In Prussia and France, normal schools are supported at the public expense; most of the pupils receive both board and tuition gratuitously; but at the close of the course they give bonds to refund the whole amount received, unless they teach under the direction of the government for a certain number of years. That such schools, devoted exclusively to the preparation of teaching, have some advantages over any other method, is sufficiently apparent from the experience of other nations: and it has occurred to me that, as supplementary to our present system, the establishment of one in this State might be eminently useful. If placed under proper auspices and located near the Capitol, where it could enjoy the supervision of the Superintendent of Common Schools, and be visited by the members of the Legislature, it might contribute in many ways to raise the tone of instruction throughout the State.'

From an examination of these reports, the Superintendent comes to the conclusion that 'these departments ought not to be abandoned, but sustained and encouraged, and the means of establishing a large number in other academies provided. They, with the other academies and colleges of the State, furnish the supply of teachers indispensable to the maintenance of our schools.' He recommends 'the extension of the public patronage to all the academies in the State, to enable them to establish teachers' departments; and in those counties where there are no academies, the establishment of normal schools.' 'One model school or more,' he thinks, 'might be advantageously established in some central parts of the State, to which teachers, and those intending to be such, might repair to acquire the best methods of conducting our common schools.'

By a resolution adopted by the Regents of the University, on the 4th of May of the same year, eight additional academies were designated for the establishment and maintenance of teachers' departments; and the appropriation to each of the institutions in which such departments had been organized by the Regents, reduced to $300 per annum. At this period, including the academies which were required, under the act of 1838, to maintain such departments in consequence of the receipt of a specified portion of the Literature Fund, the number of academies in which departments for the education of teachers were organized was twenty-three, and the number of students taught in them about six hundred."

The above facts and extracts have been principally gathered from a "Report of the Committee on Colleges, Academies, and Common Schools," to the House of Representatives in 1844, of which Mr. Hulburd, of St. Lawrence, was chairman, and the author of the able document referred to. The Committee, on passing to the consideration of a State Normal School, remark:

"From this recapitulation, it will appear that the principal reliance of the friends and supporters of the common schools, for an adequate supply of teachers, has, from a very early period, been upon the academies; that the inability of the latter to supply this demand, induced, in 1827, an increase of $150,000 of the fund, applicable to their support; and this for the express purpose of enabling them to accomplish this object; that the Regents of the University, the guardians of these institutions, characterized this increase of the fund as an unwonted and "extraordinary" act of liberality on the part of the State towards them; explicitly recognized the condition, or rather the avowed *expectations* on which it was granted; accepted the trust, and undertook to perform those conditions, and to fulfill those expectations; that, to use the language of one of the superintendents, 'the design of the law was not sustained by the measures necessary to give it the form and effect of a system;' that to remedy this evil, one academy was specially designated in each Senate district with an endowment of $500 to provide the necessary means and facilities of instruction, and an annual appropriation of $400, for the maintenance of a department for the education of teachers; and soon afterwards the sum of $28,000 added to the Literature Fund from the avails of the U. S. Deposite Fund, while eight additional academies were required to organize and maintain similar departments; that, finally, the number of these departments was augmented to twenty-three, and every exertion put forth to secure the great results originally contemplated in their establishment; and that in the judgment of successive superintendents of common schools, the Regents of the University and the most eminent and practical friends of education throughout the state, these institutions, whether considered in the aggregate or with reference to those specially designated, from time to time, for the performance of this important duty, of supplying the common schools with competent teachers, have not succeeded in the accomplishment of that object. Having, therefore, to revert again to the language of the superintendent before referred to, 'proved inadequate to the ends proposed,' may not now '*a change of plan* be insisted on without being open to the objection of abandoning a system which has not been fairly tested?' And have the academies any just reason to complain, if they are not longer permitted to enjoy undiminished the liberal appropriations conferred upon them by the State *for a specific object;* an object which they have not been able satisfactorily to accomplish?"

This committee having satisfied themselves that all former legislation n this subject was inadequate, and having examined, by a sub-committee, the Normal Schools of Massachusetts, and inquired into their operation in other countries, recommended the establishment of a Normal School at Albany, "for the education and training of teachers for common schools," and that the sum of $9,600 for the first year, and $10,000 annually for five years thereafter, in appropriations for its support. This recommendation was adopted by an almost unanimous vote.

This institution is required to be located in the county of Albany; and is to be under the supervision, management and direction of the Superintendent of Common Schools and the Regents of the University, who are authorized and required "from time to time to make all needful rules and regulations; to fix the number and compensation of teachers and others to be employed therein; to prescribe the preliminary examination, and the terms and conditions on which pupils shall be received and instructed therein—the number of pupils from the respective cities and counties, conforming as nearly as may be to the ratio of population—to fix the location of the said school, and the terms and conditions on which the grounds and buildings therefor shall be rented, if the same shall not be provided by the corporation of the city of Albany; and to provide in all things for the good government and management of the said school." They are required to appoint a board, consisting of five persons, including the Superintendent of Common Schools, who are to constitute an executive committee for the care, management and government of the school, under the rules prescribed by the Board of Regents. Such executive committee, are to make full and detailed reports from time to time to the Superintendent and Regents, and among other things to recommend such rules and regulations as they may deem proper for said schools.

The superintendent and Regents are required annually to transmit to the Legislature an account of their proceedings and expenditures, together with a detailed report from the executive committee, relating to the progress, condition, and prospects of the school.

The city of Albany tendered the use of a suitable building, free of rent, for the use of the institution, and the school was organized and commenced the business of instruction in December, 1844, under the charge of David P. Page, Esq., of Newburyport, Mass., as Principal.

The following members composed the Executive Committee, under which the institution was organized: Hon. *Samuel Young*, State Superintendent, Rev. *Alonzo Potter*, D. D., Rev. *Wm. H. Campbel. Gideon Hawley* and *Francis Dwight*, Esqrs.

To be continued.

X. ESSAY ON EDUCATION.*

BY OLIVER GOLDSMITH.

As few subjects are more interesting to society, so few have been more frequently written upon, than the education of youth. Yet is it not a little surprising, that it should have been treated almost by all in a declamatory manner? They have insisted largely on the advantages that result from it, both to the individual and to society, and have expatiated in the praise of what no one has ever been so hardy as to call in question.

Instead of giving us fine but empty harangues upon this subject, instead of indulging each his particular and whimsical system, it had been much better if the writers on this subject had treated it in a more scientific manner, repressed all the sallies of imagination, and given us the result of their observations with didactic simplicity. Upon this subject the smallest errors are of the most dangerous consequence; and the author should venture the imputation of stupidity upon a topic, where his slightest deviations may tend to injure the rising generation.

I shall, therefore, throw out a few thoughts upon this subject, which have not been attended to by others, and shall dismiss all attempts to please, while I study only instruction.

The manner in which our youth of London are at present educated is, some in free schools in the city, but the far greater number in boarding schools about town. The parent justly consults the health of his child, and finds that an education in the country tends to promote this much more than a continuance in the town. Thus far they are right: if there were a possibility of having even our free schools kept a little out of town, it would certainly conduce to the health and vigor of perhaps the mind as well as of the body. It may be thought whimsical, but it is truth,—I have found by experience, that they who have spent all their lives in cities, contract not only an effeminacy of habit, but even of thinking.

But when I have said, that the boarding schools are preferable to free schools, as being in the country, this is certainly the only advantage I can allow them; otherwise it is impossible to conceive the ignorance of those who take upon them the important trust of education. Is any man unfit for any of the professions? he finds his last resource in setting up school. Do any become bankrupts in trade? they still set up a boarding school, and drive a trade this way,

* This Essay was originally published in the BEE, No. VI, Nov. 10th, 1759. It was afterwards introduced by the author into a volume of Essays with the following observation: "This Treatise was published before Rousseau's "*Emilius:*" if there be a similitude in any instance, it is hoped that the author of the present essay will not be termed a plagiarist." In this reprint we follow Bohn's Edition of the "Works of Oliver Goldsmith." 4 vols. London. 1854.

when all others fail: nay, I have been told of butchers and barbers, who have turned schoolmasters; and, more surprising still, made fortunes in their new professions.

Could we think ourselves in a country of civilized people—could it be conceived that we have any regard for posterity, when such are permitted to take the charge of the morals, genius, and health of those dear little pledges, who may one day be the guardians of the liberties of Europe, and who may serve as the honor and bulwark of their aged parents? The care of our children, is it below the state? is it fit to indulge the caprice of the ignorant with the disposal of their children in this particular? For the state to take the charge of all its children, as in Persia or Sparta, might at present be inconvenient; but surely with great ease it might cast an eye to their instructors. Of all members of society, I do not know a more useful or a more honorable one, than a schoolmaster; at the same time that I do not see any more generally despised, or whose talents are so ill rewarded.

Were the salaries of schoolmasters to be augmented from a diminution of useless sinecures, how might it turn to the advantage of this people—a people whom, without flattery, I may in other respects term the wisest and greatest upon earth! But, while I would reward the deserving, I would dismiss those utterly unqualified for their employment: in short, I would make the business of a schoolmaster every way more respectable, by increasing their salaries, and admitting only men of proper abilities.

There are already schoolmasters appointed, and they have some small salaries; but where at present there is but one schoolmaster appointed, there should at least be two; and wherever the salary is at present twenty pounds, it should be a hundred. Do we give immoderate benefices to those who instruct ourselves, and shall we deny even subsistence to those who instruct our children? Every member of society should be paid in proportion as he is necessary: and I will be bold enough to say, that schoolmasters in a state are more necessary than clergymen, as children stand in more need of instruction than their parents.

But, instead of this, as I have already observed, we send them to board in the country to the most ignorant set of men that can be imagined. But lest the ignorance of the master be not sufficient, the child is generally consigned to the usher. This is generally some poor needy animal, little superior to a footman either in learning or spirit, invited to his place by an advertisement, and kept there merely from his being of a complying disposition, and making the children fond of him. "You give your child to be educated to a slave," says a philosopher to a rich man; "instead of one slave, you will then have two."

It were well, however, if parents, upon fixing their children in one of these houses, would examine the abilities of the usher as well as of the master; for, whatever they are told to the contrary, the usher is generally the person most employed in their education. If, then, a gentleman, upon putting out his son to one of these houses, sees the usher disregarded by the master, he may depend upon it, that he is equally disregarded by the boys; the truth is, in spite of all their endeavors to please, they are generally the laughingstock of the school. Every trick is played upon the usher; the oddity of his manners, his dress, or his language, is a fund of eternal ridicule; the master himself now and then can not avoid joining in the laugh, and the poor wretch, eternally resenting this

ill usage, seems to live in a state of war with all the family. This is a very proper person, is it not, to give children a relish for learning? They must esteem learning very much, when they see its professors used with such ceremony! If the usher be despised, the father may be assured his child will never be properly instructed.*

But let me suppose, that there are some schools without these inconveniences,—where the master and ushers are men of learning, reputation, and assiduity. If there are to be found such, they can not be prized in a state sufficiently. A boy will learn more true wisdom in a public school in a year, than by a private education in five. It is not from masters, but from their equals, youth learn a knowledge of the world: the little tricks they play each other, the punishment that frequently attends the commission, is a just picture of the great world, and all the ways of men are practiced in a public school in miniature. It is true, a child is early made acquainted with some vices in a school, but it is better to know these when a boy, than be first taught them when a man, for their novelty then may have irresistible charms.

In a public education boys early learn temperance; and if the parents and friends would give them less money upon their usual visits, it would be much to their advantage, since it may justly be said, that a great part of their disorders arise from surfeit,—*plus occidit gula quam gladius.* And now I am come to the article of health, it may not be amiss to observe, that Mr. Locke and some others have advised, that children should be inured to cold, to fatigue, and hardship, from their youth; but Mr. Locke was but an indifferent physician. Habit, I grant, has great influence over our constitutions, but we have not precise ideas upon this subject.

We know that, among savages, and even among our peasants, there are found children born with such constitutions, that they cross rivers by swimming, endure cold, thirst, hunger, and want of sleep, to a surprising degree; that when they happen to fall sick, they are cured, without the help of medicine, by nature alone. Such examples are adduced, to persuade us to imitate their manner of education, and accustom ourselves betimes to support the same fatigues. But had these gentlemen considered, first, that those savages and peasants are generally not so longlived as they who have led a more indolent life; secondly, that the more laborious the life is, the less populous is the country: had they considered, that what physicians call the *stamina vitæ*, by fatigue and labor become rigid, and thus anticipate old age; that the number who survive those rude trials, bears no proportion to those who die in the experiment: had these things been properly considered, they would not have thus extolled an education begun in fatigue and hardships. Peter the Great, willing to inure the children of his seamen to a life of hardship, ordered that they should drink only sea water, but they unfortunately all died under the experiment.

But while I would exclude all unnecessary labors, yet still I would recommend temperance in the highest degree. No luxurious dishes with high seasoning, nothing given children to force an appetite, as little sugared or salted provisions as possible, though never so pleasing; but milk, morning and night, should be their constant food. This diet would make them more healthy than any of those slops that are usually cooked by the mistress of a boarding school;

* The author's remarks upon this subject are the more worthy of attention, that he himself knew by experience the duties and annoyances of such a situation.—*Bohn.*

besides, it corrects any consumptive habits, not unfrequently found amongst the children of city parents.

As boys should be educated with temperance, so the first greatest lesson that should be taught them is, to admire frugality. It is by the exercise of this virtue alone, they can ever expect to be useful members of society. It is true, lectures continually repeated upon this subject, may make some boys, when they grow up, run into an extreme, and become misers; but it were well had we more misers than we have among us. I know few characters more useful in society; for a man's having a larger or smaller share of money lying useless by him no way injures the commonwealth; since, should every miser now exhaust his stores, this might make gold more plenty, but it would not increase the commodities or pleasures of life; they would still remain as they are at present: it matters not, therefore, whether men are misers or not, if they be only frugal, laborious, and fill the station they have chosen. If they deny themselves the necessaries of life, society is no way injured by their folly.

Instead, therefore, of romances, which praise young men of spirit, who go through a variety of adventures, and, at last, conclude a life of dissipation, folly, and extravagance, in riches and matrimony, there should be some men of wit employed to compose books that might equally interest the passions of our youth; where such a one might be praised for having resisted allurements when young, and how he, at last, became lord mayor—how he was married to a lady of great sense, fortune, and beauty: to be as explicit as possible, the old story of Whittington, were his cat left out, might be more serviceable to the tender mind than either Tom Jones, Joseph Andrews, or a hundred others, where frugality is the only good quality the hero is not possessed of. Were our schoolmasters, if any of them had sense enough to draw up such a work, thus employed, it would be much more serviceable to their pupils, than all the grammars and dictionaries they may publish these ten years.

Children should early be instructed in the arts, from which they would afterwards draw the greatest advantages. When the wonders of nature are never exposed to our view, we have no great desire to become acquainted with those parts of learning which pretend to account for the phenomena. One of the ancients complains, that as soon as young men have left school, and are obliged to converse in the world, they fancy themselves transported into a new region: "*Ut cum in forum venerint existiment se in aliam terrarum orbem delatos.*" We should early, therefore, instruct them in the experiments, if I may so express it, of knowledge, and leave to maturer age the accounting for the causes. But instead of that, when boys begin natural philosophy in colleges, they have not the least curiosity for those parts of the science which are proposed for their instruction; they have never before seen the phenomena, and consequently have no curiosity to learn the reasons. Might natural philosophy, therefore, be made their pastime in school, by this means it would in college become their amusement.

In several of the machines now in use, there would be ample field both for instruction and amusement: the different sorts of the phosphorus, the artificial pyrites, magnetism, electricity, the experiments upon the rarefaction and weight of the air, and those upon elastic bodies, might employ their idle hours, and none should be called from play to see such experiments but such as thought proper. At first, then, it would be sufficient if the instruments, and the effects

of their combination, were only shown; the causes should be deferred to a maturer age, or to those times when natural curiosity prompts us to discover the wonders of nature. Man is placed in this world as a spectator; when he is tired with wondering at all the novelties about him, and not till then, does he desire to be made acquainted with the causes that create those wonders.

What I have observed with regard to natural philosophy, I would extend to every other science whatsoever. We should teach them as many of the facts as were possible, and defer the causes until they seemed of themselves desirous of knowing them. A mind thus leaving school stored with all the simple experiences of science, would be the fittest in the world for the college course; and though such a youth might not appear so bright, or so talkative, as those who had learned the real principles and causes of some of the sciences, yet he would make a wiser man, and would retain a more lasting passion for letters, than he who was early burdened with the disagreeable institution of effect and cause.

In history, such stories alone should be laid before them as might catch the imagination: instead of this, they are too frequently obliged to toil through the four empires, as they are called, where their memories are burdened by a number of disgusting names, that destroy all their future relish for our best historians, who may be termed the truest teachers of wisdom.

Every species of flattery should be carefully avoided: a boy, who happens to say a sprightly thing, is generally applauded so much, that he happens to continue a coxcomb sometimes all his life after. He is reputed a wit at fourteen, and becomes a blockhead at twenty. Nurses, footmen, and such, should therefore be driven away as much as possible. I was even going to add, that the mother herself should stifle her pleasure or her vanity, when little master happens to say a good or smart thing. Those modest lubberly boys who seem to want spirit, generally go through their business with more ease to themselves, and more satisfaction to their instructors.

There has of late a gentleman appeared, who thinks the study of rhetoric essential to a perfect education.* That bold male eloquence, which often without pleasing convinces, is generally destroyed by such institutions. Convincing eloquence, however, is infinitely more serviceable to its possessor than the most florid harangue, or the most pathetic tones that can be imagined; and the man who is thoroughly convinced himself, who understands his subject, and the language he speaks in, will be more apt to silence opposition, than he who studies the force of his periods, and fills our ears with sounds, while our minds are destitute of conviction.

It was reckoned the fault of the orators at the decline of the Roman empire, when they had been long instructed by rhetoricians, that their periods were so harmonious, as that they could be sung as well as spoken. What a ridiculous figure must one of these gentlemen cut, thus measuring syllables, and weighing words, when he should plead the cause of his client! Two architects were once candidates for the building a certain temple at Athens: the first harangued the crowd very learnedly upon the different orders of architecture, and showed them in what manner the temple should be built; the other, who got up to speak after him, only observed, that what his brother had spoken he could do; and thus he at once gained his cause.

* Probably Mr. Thomas Sheridan, who about this time read lectures on rhetoric and elocution.—*Bohn.*

To teach men to be orators, is little less than to teach them to be poets; and for my part, I should have too great a regard for my child, to wish him a manor only in a bookseller's shop.

Another passion which the present age is apt to run into, is to make children learn all things,—the languages, the sciences, music, the exercises, and painting. Thus the child soon becomes a *talker* in all, but a *master* in none. He thus acquires a superficial fondness for every thing, and only shows his ignorance when he attempts to exhibit his skill.

As I deliver my thoughts without method or connection, so the reader must not be surprised to find me once more addressing schoolmasters on the present method of teaching the learned languages, which is commonly by literal translations. I would ask such, if they were to travel a journey, whether those parts of the road in which they found the greatest difficulties would not be most strongly remembered? Boys who, if I may continue the allusion, gallop through one of the ancients with the assistance of a translation, can have but a very slight acquaintance either with the author or his language. It is by the exercise of the mind alone that a language is learned; but a literal translation, on the opposite page, leaves no exercise for the memory at all. The boy will not be at the fatigue of remembering, when his doubts are at once satisfied by a glance of the eye; whereas, were every word to be sought from a dictionary, the learner would attempt to remember, in order to save him the trouble of looking out for it for the future.

To continue in the same pedantic strain, though no schoolmaster, of all the various grammars now taught in schools about town, I would recommend only the old common one; I have forgot whether Lilly's, or an emendation of him. The others may be improvements; but such improvements seem to me only mere grammatical niceties, no way influencing the learner, but perhaps loading him with trifling subtleties, which at a proper age he must be at some pains to forget.

Whatever pains a master may take to make the learning of the languages agreeable to his pupil, he may depend upon it, it will be at first extremely unpleasant. The rudiments of every language, therefore, must be given as a task, not as an amusement. Attempting to deceive children into instruction of this kind, is only deceiving ourselves; and I know no passion capable of conquering a child's natural laziness but fear. Solomon has said it before me; nor is there any more certain, though perhaps more disagreeable truth, than the proverb in verse, too well known to repeat on the present occasion. It is very probable that parents are told of some masters who never use the rod, and consequently are thought the properest instructors for their children; but though tenderness is a requisite quality in an instructor, yet there is too often the truest tenderness in well-timed correction.

Some have justly observed, that all passion should be banished on this terrible occasion; but, I know not how, there is a frailty attending human nature, that few masters are able to keep their temper whilst they correct. I knew a good-natured man, who was sensible of his own weakness in this respect, and consequently had recourse to the following expedient to prevent his passions from being engaged, yet at the same time administer justice with impartiality. Whenever any of his pupils committed a fault, he summoned a jury of his peers,—I mean of the boys of his own or the next classes to him; his ac-

cusers stood forth; he had a liberty of pleading in his own defense, and one or two more had a liberty of pleading against him: when found guilty by the panel, he was consigned to the footman who attended in the house, who had previous orders to punish, but with lenity. By this means the master took off the odium of punishment from himself; and the footman, between whom and the boys there could not be even the slightest intimacy, was placed in such a light as to be shunned by every boy in the school.

And now I have gone thus far, perhaps you will think me some pedagogue, willing, by a well-timed puff, to increase the reputation of his own school; but such is not the case. The regard I have for society, for those tender minds who are the objects of the present essay, is the only motive I have for offering those thoughts, calculated not to surprise by their novelty, or the elegance of composition, but merely to remedy some defects which have crept into the present system of school education.

[To the foregoing "*Essay on Education*" we add a few detached thoughts selected from other publications and letters by the same author.]

HOME EDUCATION. ROMANCE READING. FRUGALITY.

The reasons you have given me for breeding up your son a scholar are judicious and convincing; I should, however, be glad to know for what particular profession he is designed. If he be assiduous, and divested of strong passions, (for passions in youth always lead to pleasure,) he may do very well in your college; for, it must be owned, that the industrious poor have good encouragement there, perhaps better than in any other in Europe. But, if he has ambition, strong passions, and an exquisite sensibility of contempt, do not send him there, unless you have no other trade for him except your own. It is impossible to conceive how much may be done by a proper education at home. A boy, for instance, who understands perfectly well Latin, French, Arithmetic, and the principles of the civil law, and can write a fine hand, has an education that may qualify him for any undertaking. And these parts of learning should be carefully inculcated, let him be designed for whatever calling he will. Above all things, let him never touch a romance or novel; those paint beauty in colors more charming than nature, and describe happiness that man never tastes. How delusive, how destructive, are those pictures of consummate bliss! They teach the youthful mind to sigh after beauty and happiness which never existed; to despise the little good which fortune has mixed in our cup, by expecting more than she ever gave; and in general, take the word of a man who has seen the world, and has studied human nature more by experience than precept—take my word for it, I say, that books teach us very little of the world. The greatest merit in a state of poverty would only serve to make the possessor ridiculous; may distress, but can not relieve him. Frugality, and even avarice, in the lower orders of mankind, are true ambition. These afford the only ladder for the poor to rise to preferment. Teach, then, my dear Sir, to your son thrift and economy. Let his poor wandering uncle's example be placed before his eyes. I had learned from books to be disinterested and generous, before I was taught from experience the necessity of being prudent. I had contracted the habits and notions of a philosopher, while I was exposing myself to the insidious approaches of cunning; and often by being, even with my narrow finances, charitable to excess, I forgot the rules of justice, and placed myself in the very

situation of the wretch who thanked me for my bounty. When I am in the remotest part of the world, tell him this, and perhaps he may improve from my example.—*Letter to Rev. Henry Goldsmith.* 1759.

SELF-KNOWLEDGE AND SELF-GOVERNMENT.

In the various objects of knowledge, which I have had the pleasure of seeing you study under my care, as well as those which you have acquired under the various teachers who have hitherto instructed you, the most material branch of information which it imports a human being to know, has been entirely overlooked,—I mean the knowledge of yourself. There are, indeed, very few persons who possess at once the capability and the disposition to give you this instruction. Your parents, who alone are perhaps sufficiently acquainted with you for the purpose, are usually disqualified for the task, by the very affection and partiality which would prompt them to undertake it. Your masters, who probably labor under no such prejudices, have seldom either sufficient opportunities of knowing your character, or are so much interested in your welfare, as to undertake an employment so unpleasant and laborious. You are, as yet, too young and inexperienced to perform this important office for yourself, or, indeed, to be sensible of its very great consequence to your happiness. The ardent hopes and the extreme vanity natural to early youth, blind you at once to every thing within and every thing without, and make you see both yourself and the world in false colors. This illusion, it is true, will gradually wear away as your reason matures, and your experience increases; but the question is, what is to be done in the meantime? Evidently there is no plan for you to adopt but to make use of the reason and experience of those who are qualified to direct you.

Of this, however, I can assure you, both from my own experience, and from the opinions of all those whose opinions deserve to be valued, that if you aim at any sort of eminence or respectability in the eyes of the world, or in those of your friends; if you have any ambition to be distinguished in your future career for your virtues, or talents, or accomplishments, this self-knowledge of which I am speaking is above all things requisite. For how is your moral character to be improved, unless you know what are the virtues and vices which your natural disposition is calculated to foster, and what are the passions which are most apt to govern you? How are you to attain eminence in any talent or pursuit, unless you know in what particular way your powers of mind best capacitate you for excelling? It is therefore my intention, in this letter, to offer you a few hints on this most important subject.

When you come to look abroad into the world, and to study the different characters of men, you will find that the happiness of any individual depends not, as you would suppose, on the advantages of fortune or situation, but principally on the regulation of his own mind. If you are able to secure tranquillity within, you will not be much annoyed by any disturbance without. The great art of doing this consists in a proper government of the passions—in taking care that no propensity is suffered to acquire so much power over your mind as to be the cause of immoderate uneasiness, either to yourself or others. I insist particularly on this point, my dear young friend, because, if I am not greatly deceived, you are yourself very much disposed by nature to two passions, the most tormenting to the possessor, and the most offensive to others, of any which afflict the human race,—I mean pride and anger. Indeed, those

two dispositions seem to be naturally connected with each other; for you have probably remarked, that most proud men are addicted to anger, and that most passionate men are also proud. Be this as it may, I can confidently assure you, that if an attempt is not made to subdue those uneasy propensities now when your temper is flexible, and your mind easy of impression, they will most infallibly prove the bane and torment of your whole life. They will not only destroy all possibility of your enjoying any happiness yourself, but they will produce the same effect on those about you; and by that means you will deprive yourself both of the respect of others, and the approbation of your own heart,—the only two sources from which can be derived any substantial comfort, or real enjoyment.

It is, moreover, a certain principle in morals, that all the bad passions, but especially those of which we are speaking, defeat, in all cases, their own purposes,—a position which appears quite evident, on the slightest examination. For what is the object which the proud man has constantly in view? Is it not to gain distinction, and respect, and consideration among mankind? Now, it is unfortunately the nature of pride to aim at this distinction, not by striving to acquire such virtues and talents as would really entitle him to it, but by laboring to exalt himself above his equals by little and degrading methods; by endeavoring, for example, to outvie them in dress, or show, or expense, or by affecting to look down, with haughty superciliousness, on such as are inferior to himself only by some accidental advantages for which he is no way indebted to his own merit. The consequence of this is, that all mankind declare war against him; his inferiors, whom he affects to despise, will hate him, and consequently will exert themselves to injure and depress him; and his superiors, whom he attempts to imitate, will ridicule his absurd and unavailing efforts to invade what they consider as their own peculiar province.

If it may with truth be said, that a proud man defeats his own purposes, the same may, with equal certainty, be affirmed of a man who gives way to violence of temper. His angry invectives, his illiberal abuse, and his insulting language, produce very little effect on those who hear him, and who, perhaps, only smile at his infirmities; but who can describe the intolerable pangs of vexation, rage, and remorse, by which the heart of a passionate man is successively ravaged? Alas! it is himself alone for whom the storm is pent up, who is torn by its violence, and not those against whom its fury is meant to be directed.—*Letter to a Pupil.*

FOREIGN TRAVEL AND RESIDENCE AT A UNIVERSITY.

We seem divided, whether an education formed by traveling or by a sedentary life be preferable. We see more of the world by travel, but more of human nature by remaining at home; as in an infirmary, the student, who only attends to the disorders of a few patients, is more likely to understand his profession, than he who indiscriminately examines them all.

A youth just landed at the Brille resembles a clown at a puppet show; carries his amazement from one miracle to another; from this cabinet of curiosities to that collection of pictures: but wondering is not the way to grow wise.

Whatever resolutions we set ourselves not to keep company with our countrymen abroad, we shall find them broken when once we leave home. Among strangers we consider ourselves as in a solitude, and it is but natural to desire society.

There is more knowledge to be acquired from one page of the volume of mankind, if the scholar only knows how to read, than in volumes of antiquity. We grow learned, not wise, by too long continuance at college.

This points out the time in which we should leave the university. Perhaps the age of twenty-one, when at our universities the first degree is generally taken, is the proper period.

The universities of Europe may be divided into three classes. Those upon the old scholastic establishment, where the pupils are immured, talk nothing but Latin, and support every day syllogistical disputations in school philosophy. Would not one be apt to imagine this was the proper education to make a man a fool? Such are the universities of Prague, Louvain, and Padua. The second is, where the pupils are under few restrictions, where all scholastic jargon is banished, where they take a degree when they think proper, and live not in the college, but the city. Such are Edinburgh, Leyden, Gottingen, Geneva. The third is a mixture of the two former, where the pupils are restrained, but not confined; where many, though not all, the absurdities of scholastic philosophy are suppressed, and where the first degree is taken after four years' matriculation. Such are Oxford, Cambridge, and Dublin.

As for the first class, their absurdities are too apparent to admit of a parallel. It is disputed which of the two last are more conducive to national improvement.

Skill in the professions is acquired more by practice than study; two or three years may be sufficient for learning their rudiments. The universities of Edinburgh, &c., grant a license for practicing them when the student thinks proper, which our universities refuse till after a residence of several years.

The dignity of the professions may be supported by this dilatory proceeding; but many men of learning are thus too long excluded from the lucrative advantages, which superior skill has a right to expect.

Those universities must certainly be most frequented, which promise to give in two years, the advantages which others will not under twelve.

The man who has studied a profession for three years, and practiced it for nine more, will certainly know more of his business than he who has only studied it for twelve.

The universities of Edinburgh, &c., must certainly be most proper for the study of those professions in which men choose to turn their learning to profit as soon as possible.

The universities of Oxford, &c., are improper for this, since they keep the student from the world, which, after a certain time, is the only true school of improvement.

When a degree in the professions can be taken only by men of independent fortunes, the number of candidates in learning is lessened, and, consequently, the advancement of learning retarded.

This slowness of conferring degrees is a remnant of scholastic barbarity. Paris, Louvain, and those universities which still retain their ancient institutions, confer the doctor's degree slower even than we.

The statutes of every university should be considered as adapted to the laws of its respective government. Those should alter as these happen to fluctuate.

Four years spent in the arts, (as they are called in colleges,) is perhaps laying too laborious a foundation. Entering a profession without any previous acquisitions of this kind, is building too bold a superstructure.

Countries wear very different appearances to travelers of different circumstances. A man who is whirled through Europe in a post-chaise, and the pilgrim who walks the grand tour on foot, will form very different conclusions.*

To see Europe with advantage, a man should appear in various circumstances of fortune; but the experiment would be too dangerous for young men.

There are many things relative to other countries which can be learned to more advantage at home; their laws and policies are among the number.

The greatest advantages which result to youth from travel, are an easy address, the shaking off national prejudices, and the finding nothing ridiculous in national peculiarities.

The time spent in these acquisitions could have been more usefully employed at home. An education in a college seems therefore preferable.—*Present state of Polite Learning.* 1759.

CHARACTERISTICS OF DIFFERENT UNIVERSITIES.

We attribute to universities either too much or too little. Some assert that they are the only proper places to advance learning; while others deny even their utility in forming an education. Both are erroneous.

Learning is most advanced in populous cities, where chance often conspires with industry to promote it; where the members of this large university, if I may so call it, catch manners as they rise; study life, not logic, and have the world for correspondents.

The greatest number of universities have ever been founded in times of the greatest ignorance.

New improvements in learning are seldom adopted in colleges until admitted everywhere else. And this is right: we should always be cautious of teaching the rising generation uncertainties for truth. Thus, though the professors in universities have been too frequently found to oppose the advancement of learning, yet, when once established, they are the properest persons to diffuse it.

* In the first edition our author added, *Haud inexpertus loquor;* for he traveled through France, &c., on foot. In his sketch of Baron Holberg, he gives an example of the advantages which may be derived by even a poor student from foreign travel.

"This was, perhaps, one of the most extraordinary personages that has done honor to the present century. His being the son of a private sentinel did not abate the ardor of his ambition, for he learned to read, though without a master. Upon the death of his father, being left entirely destitute, he was involved in all that distress which is common among the poor, and of which the great have scarcely any idea. However, though only a boy of nine years old, he still persisted in pursuing his studies, traveled about from school to school, and begged his learning and his bread. When at the age of seventeen, instead of applying himself to any of the lower occupations, which seem best adapted to such circumstances, he was resolved to travel for improvement from Norway, the place of his birth, to Copenhagen, the capital city of Denmark. He lived there by teaching French, at the same time avoiding no opportunity of improvement that his scanty funds could permit. But his ambition was not to be restrained, or his thirst of knowledge satisfied, until he had seen the world. Without money, recommendations, or friends, he undertook to set out upon his travels, and make the tour of Europe on foot. A good voice, and a trifling skill in music, were the only finances he had to support an undertaking so extensive; so he traveled by day, and at night sung at the doors of peasants' houses to get himself a lodging. In this manner, while yet very young, Holberg passed through France, Germany, and Holland; and coming over to England, took up his residence for two years in the university of Oxford. Here he subsisted by teaching French and music, and wrote his universal history, his earliest, but worst performance. Furnished with all the learning of Europe, he at last thought proper to return to Copenhagen, where his ingenious productions quickly gained him that favor he deserved."

Teaching by lecture, as at Edinburgh, may make men scholars, if they think proper; but instructing by examination, as at Oxford, will make them so often against their inclination.

Edinburgh only disposes the student to receive learning; Oxford often makes him actually learned.

In a word, were I poor, I should send my son to Leyden or Edinburgh, though the annual expense in each, particularly in the first, is very great. Were I rich, I would send him to one of our own universities. By an education received in the first, he has the best likelihood of living; by that received in the latter, he has the best chance of becoming great.

We have of late heard much of the necessity of studying oratory. Vespasian was the first who paid professors of rhetoric for publicly instructing youth at Rome. However, those pedants never made an orator.

The best orations that ever were spoken were pronounced in the parliaments of King Charles the First. These men never studied the rules of oratory.

Mathematics are, perhaps, too much studied at our universities. This seems a science to which the meanest intellects are equal.* I forget who it is that says, "All men might understand mathematics, if they would."

The most methodical manner of lecturing, whether on morals or nature, is, first rationally to explain, and then produce the experiment. The most instructive method is to show the experiment first; curiosity is then excited, and attention awakened to every subsequent deduction. Hence it is evident, that in a well formed education, a course of history should ever precede a course of ethics.

The sons of our nobility are permitted to enjoy greater liberties in our universities than those of private men. I should blush to ask the men of learning and virtue who preside in our seminaries, the reason of such a prejudicial distinction. Our youth should there be inspired with a love of philosophy; and the first maxim among philosophers is, that merit only makes distinction.

Whence has proceeded the vain magnificence of expensive architecture in our colleges? Is it that men study to more advantage in a palace than in a cell? One single performance of taste or genius confers more real honors on its parent university, than all the labors of the chisel.

Surely pride itself has dictated to the fellows of our colleges the absurd passion of being attended at meals, and on other public occasions, by those poor men who, willing to be scholars, come in upon some charitable foundation. It implies a contradiction, for men to be at once learning the *liberal* arts, and at the same time treated as *slaves;* at once studying freedom, and practicing servitude.

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* This is partly true, but not to the extent which is implied in our author's general assertion. The elements of the science may certainly be acquired without any extraordinary share of intellect; but surely distinguished proficiency in the higher branches of mathematics implies something more than the industrious efforts of the "meanest intellects." Goldsmith himself was a very indifferent mathematician; and this will perhaps account sufficiently for his attempt to underrate the importance of the science, and his wish to consider its acquisition as the despicable triumph of plodding mediocrity.—*Bohn.*

For a full and able discussion of the claims of mathematics in a course of liberal studies, *see* Sir William Hamilton's Miscellanies.

XI. SAMUEL JOHNSON

THOUGHTS ON EDUCATION AND CONDUCT.

Gathered from his Conversations reported by Boswell.

OPINION ON HIS OWN EDUCATION.

JOHNSON himself began to learn Latin with Mr. Hawkins, usher, or undermaster of Litchfield school, "A man (said he) very skillful in his little way."—With him he continued two years, and then rose to be under the care of Mr. Hunter, the head-master, who, according to his account, "was very severe, and wrong-headedly severe. He used (said he) to beat us unmercifully; and he did not distinguish between ignorance and negligence; for he would beat a boy equally for not knowing a thing, as for neglecting to know it. He would ask a boy a question; and if he did not answer him, he would beat him, without considering whether he had an opportunity of knowing how to answer it; for instance, he would call upon a boy and ask him in Latin for a candlestick, which the boy could not expect to be asked. Now, Sir, if a boy could answer every question, there would be no need of a master to teach him."

Johnson, however, was very sensible how much he owed to Mr. Hunter. Mr. Langton one day asked him how he acquired so accurate a knowledge of Latin, in which he was thought not to be exceeded by any man of his time. He said, "My master whipt me very well. Without that, Sir, I should have done nothing." He also told Mr. Langton, that while Hunter was flogging his boys unmercifully, he used to say, "And this I do to save you from the gallows." Johnson, upon all occasions, expressed his approbation of enforcing instruction by means of the rod. "I would rather have the rod the general terror of all, to make them learn, than tell a child, if you do thus, or thus, you will be more esteemed than your brothers or sisters. The rod produces an effect that terminates in itself. A child is afraid of being whipped, and gets his task, and there's an end on't; whereas, by exciting emulation and comparisons of superiority, you lay the foundation of lasting mischief; you make brothers and sisters hate each other."

INFLUENCE OF EDUCATION.

He allowed very great influence to education. "I do not deny but there is some original difference in minds; but it is nothing in comparison of what is formed by education. We may instance the science of *numbers*, which all minds are equally capable of attaining; yet we find a prodigious difference in the powers of different men, in that respect, after they are grown up, because their minds have been more or less exercised in it; and I think the same cause will explain the difference of excellence in other things, gradations admitting always some difference in the first principles."

SCHEME* FOR THE CLASSES OF A GRAMMAR SCHOOL.

"When the introduction, or formation of nouns and verbs, is perfectly mastered, let them learn

Corderius, by Mr. Clarke, beginning at the same time to translate out of the introduction, that by this means they may learn the syntax. Then let them proceed to

Erasmus, with an English translation, by the same author.

The second class learns Eutropius and Cornelius Nepos, or Justin, with the translation.

N. B. The first class gets for their part every morning the rules which they have learned before, and in the afternoon learns the Latin rules of the nouns and verbs.

They are examined in the rules which they have learned every Thursday and Saturday.

The second class does the same whilst they are in Eutropius; afterwards their part is in the irregular nouns and verbs, and in the rules for making and scanning verses. They are examined as the first.

The third class learns Ovid's Metamorphoses in the morning, and Cæsar's Commentaries in the afternoon.

Practice in the Latin rules till they are perfect in them; afterwards in Mr. Leed's Greek Grammar. Examined as before.

Afterwards they proceed to Virgil, beginning at the same time to write themes and verses and to learn Greek; from thence passing on to Horace, &c., as shall seem most proper."

SCHEME FOR THE STUDIES OF A STUDENT FITTING FOR THE UNIVERSITY.

"I know not well what books to direct you to, because you have not informed me what study you will apply yourself to. I believe it will be most for your advantage to apply yourself wholly to the languages, till you go to the University. The Greek authors I think it best for you to read are these:

Cebes.	Attic.
Ælian.	
Lucian by Leeds.	
Xenophon.	
Homer.	Ionic.
Theocritus.	Doric.
Euripides.	Attic and Doric.

Thus you will be tolerably skilled in all the dialects, beginning with the Attic, to which the rest must be referred.

In the study of Latin, it is proper not to read the latter authors, till you are well versed in those of the purist ages; as Terence, Tully, Cæsar, Sallust, Nepos, Velleius Paterculus, Virgil, Horace, Phædrus.

The greatest and most necessary task still remains, to attain a habit of expression, without which knowledge is of little use. This is necessary in Latin, and more necessary in English; and can only be acquired by a daily imitation of the best and correctest authors."

STUDY OF GREEK AND LATIN.

"Dr. Johnson and I one day took a sculler at the Temple stairs, and set out

* Mr. Croker in his edition of Boswell's Johnson—characterizes this scheme as a "Crude Sketch," and doubts whether it contains Dr. Johnson's mature and general sentiments on even the narrow branch of education to which it refers.

for Greenwich. I asked him if he really thought a knowledge of the Greek and Latin languages an essential requisite to a good education. JOHNSON. "Most certainly, Sir; for those who know them have a very great advantage over those who do not. Nay, sir, it is wonderful what a difference learning makes upon people even in the common intercourse of life, which does not appear to be much connected with it." "And yet (said Mr. B.) people go through the world very well, and carry on the business of life to good advantage, without learning." *J.* "Why, Sir, that may be true in cases where learning can not possibly be of any use; for instance, this boy rows us as well without learning as if he could sing the song of Orpheus to the Argonauts, who were the first sailors." He then called to the boy, "What would you give, my lad, to know about the Argonauts?" "Sir, (said the boy,) I would give what I have." Johnson was much pleased with the answer, and we gave him a double fare. The Doctor then turning to Mr. B. said, "Sir, a desire of knowledge is the natural feeling of mankind; and every human being, whose mind is not debauched, will be willing to give all that he has to get knowledge."

VALUE OF KNOWLEDGE TO THE WORKING CLASSES.

To Mr. Langton when about to established a school upon his estate, it had been suggested, that it might have a tendency to make the people less industrious. "No, sir, (said Johnson.) While learning to read and write is a distinction, the few who have that distinction may be the less inclined to work; but when everybody learns to read and write, it is no longer a distinction. A man who has a laced waistcoat is too fine a man to work; but if everybody had laced waistcoats, we should have people working in laced waistcoats. There are no people whatever more industrious, none who work more than our manufacturers; yet they have all learnt to read and write. Sir, you must not neglect doing a thing immediately good, from fear of remote evil, from fear of its being abused. A man who has candles may sit up too late, which he would not do if he had not candles; but nobody will deny that the art of making candles, by which light is continued to us beyond the time that the sun gives us light, is a valuable art, and ought to be preserved."

On another occasion he said, "Where there is no education, as in savage countries, men will have the upper hand of women. Bodily strength, no doubt contributes to this; but it would be so, exclusive of that; for it is mind that always governs. When it comes to dry understanding, man has the better."

Mr. Boswell observed, that he was well assured, that the people of Otaheite who have the bread tree, the fruit of which serves them for bread, laughed heartily when they were informed of the tedious process necessary with us to have bread;—plowing, sowing, harrowing, reaping, threshing, grinding, baking. JOHNSON. "Why, sir, all ignorant savages will laugh when they are told of the advantages of civilized life. Were you to tell men who live without houses, how we pile brick upon brick, and rafter upon rafter, and that after a house is raised to a certain height, a man tumbles off a scaffold, and breaks his neck, he would laugh heartily at our folly in building; but it does not follow that men are better without houses. No, sir (holding up a slice of a good loaf) that is better than the bread tree."

Goldsmith once attempted to maintain, perhaps from affectation of paradox, "that knowledge was not desirable on its own account, for it often was a source

of unhappiness." "Why, sir, (said Johnson) that knowledge may in some cases produce unhappiness, I allow. But upon the whole, knowledge, *per se*, is certainly an object which every man would wish to attain, although perhaps, he may not take the trouble necessary for attaining it. Much might be done if a man put his whole mind to a particular object. By doing so, Norton made himself the great lawyer that he was allowed to be."

He one day observed, "All knowledge is of itself of some value. There is nothing so minute or inconsiderable, that I would not rather know it than not. In the same manner, all power of whatever sort, is of itself desirable. A man would not submit to hem a ruffle of his wife, or his wife's maid; but if a mere wish could obtain it, he would rather wish to be able to hem a ruffle."

PUBLIC SCHOOLS (THE GREAT BOARDING SCHOOLS) AND PRIVATE TUITION AT HOME COMPARED.

Of education at the Public Schools, Johnson displayed the advantages and disadvantages in a luminous manner; but his arguments preponderated much in favor of the benefit which a boy of good parts might receive at one of them.

"At a great school there is all the splendor and illumination of many minds; the radiance of all is centered in each, or at least is reflected upon each. But we must own that neither a dull boy, nor an idle boy, will do so well at a great school as at a private one. For at a great school, there are always boys enough to do easily, who are sufficient to keep up the credit of the school; and after whipping being tried to no purpose, the dull or idle boys are left at the end of the class, having the appearance of going through the course, but learning nothing at all. Such boys may do well at a private school, where constant attention is paid to them, and they are watched. So that the question of public or private education is not properly a general one, but whether one or the other is best for my son."

At another time he said, "There is now less flogging in our great schools than formerly, but then less is learned there; so that what the boys get at one end they lose at the other." Yet more, he observed, was learned in public than in private schools, from emulation; "there is the collision of mind with mind, or the radiance of many minds pointing to one center."

REFINEMENTS AND NOVELTIES IN EDUCATION.

"I hate by-roads in education. Education is as well known, and has long been as well known, as ever it can be. Endeavoring to make children prematurely wise is useless labor. Suppose they have more knowledge at five or six years than other children, what use can be made of it? It will be lost before it is wanted, and the waste of so much time and labor of the teacher can never be repaid. Too much is expected from precocity, and too little performed. Miss ——— was an instance of early cultivation; but in what did it terminate? In marrying a little Presbyterian parson, who keeps an infant boarding school, so that all her employment now is,

"To suckle fools, and chronicle small beer."

She tells the children, 'this is a cat, and that is a dog with four legs and a tail; see there! you are much better than a cat or a dog, for you can speak.' I am always for getting a boy forward in his learning; for that is a sure good. I would let him at first read any English book which happens to engage his attention; because you have done a great deal when you have brought him to have entertainment from a book. He'll get better books afterward."

Johnson advised Mr. Boswell not to *refine* in the education of his children. "Life will not bear refinement; you must do as other people do. Above all accustom your children constantly to tell the truth; if a thing happened at one window, and they, when relating it, say that it happened at another, do not let it pass, but instantly check them; you do not know where deviation from truth will end." BOSWELL. "It may come to the door: and when once an account is at all varied in one circumstance, it may by degrees be varied so as to be totally different from what really happened." A lady in the company, whose fancy was impatient of the rein, fidgeted at this, and ventured to say, "Nay, this is too much. If Mr. Johnson should forbid me to drink tea I would comply, as I should feel the restraint only twice a day; but little variations in narrative must happen a thousand times a day, if one is not perpetually watching. JOHNSON. "Well, Madam, and you ought to be perpetually watching. It is more from carelessness about truth than from intentional lying that there is so much falsehood in the world."

Talking of instruction, "People have now-a-days got a strange opinion that every thing should be taught by lectures. Now I can not see that lectures can do so much good as reading the books from which the lectures are taken. I know nothing that can be best taught by lectures, except where experiments are to be shown. You may teach chemistry by lectures; you might teach making of shoes by lectures!"

"Education in England has been in danger of being hurt by two of its greatest men, Milton and Locke. Milton's plan is impracticable, and I suppose has never been tried; Locke's I fancy, has been tried often enough, but is very imperfect; it gives too much on one side, and too little on the other: it gives too little to literature."

CORPORAL PUNISHNENT BY THE SCHOOLMASTER.

The master of a public school at Campbell-town, in Scotland, had been suspended from his office, on a charge against him of having used immoderate and cruel correction. Mr. Boswell was engaged to plead the cause of the master, and consulted Dr. Johnson on the subject, who made the following observations: "The charge is, that he has used immoderate and cruel correction. Correction in itself, is not cruel; children, being not reasonable, can be governed only by fear. To impress this fear, is therefore one of the first duties of those who have the care of children. It is the duty of a parent, and has never been thought inconsistent with parental tenderness. It is the duty of a master, who is in the highest exaltation when he is *loco parentis*. Yet, as good things become evil by excess, correction, by being immoderate, may become cruel. But when is correction immoderate? When it is more frequent or more severe than is required *ad monendum et docendum*, for reformation and instruction. No severity is cruel which obstinacy makes necessary; for the greatest cruelty would be to desist, and leave the scholar too careless for instruction, and too much hardened for reproof. Locke, in his treatise of Education, mentions a mother with applause, who whipped an infant eight times before she had subdued it; for had she stopped at the seventh act of correction, her daughter, says he, would have been ruined. The degrees of obstinacy in young minds are very different; as different must be the degrees of persevering severity. A stubborn scholar must be corrected till he is subdued. The discipline of a school is military. There must either be unbounded licence or absolute authority. The master who pun-

ishes, not only consults the future happiness of him who is the immediate subject of correction, but he propagates obedience through the whole school, and establishes regularity by exemplary justice. The victorious obstinacy of a single boy would make his future endeavors of reformation or instruction totally ineffectual: obstinacy therefore must never be victorious. Yet it is well known, that there sometimes occurs a sullen and hardy resolution, that laughs at all common punishment, and bids defiance to all common degrees of pain. Correction must be proportioned to occasions. The flexible will be reformed by gentle discipline, and the refractory must be subdued by harsher methods. The degrees of scholastic, as of military punishment, no stated rules can ascertain. It must be enforced till it overpowers temptation; till stubbornness becomes flexible, and perverseness regular. Custom and reason have, indeed, set some bounds to scholastic penalties: the schoolmaster inflicts no capital punishments, nor enforces his edicts by either death or mutilation. The civil law has wisely determined, that a master who strikes at a scholar's eye shall be considered as criminal. But punishments, however severe, that produce no lasting evil, may be just and reasonable, because they may be necessary. Such have been the punishments used by the schoolmaster accused. No scholar has gone from him either blind or lame, or with any of his limbs or powers injured or impaired. They were irregular, and he punished them; they were obstinate, and he enforced his punishment. But, however provoked, he never exceeded the limits of moderation, for he inflicted nothing beyond present pain; and how much of that was required, no man is so little able to determine as those who have determined against him—the parents of the offenders. It has been said, that he used unprecedented and improper instruments of correction. Of this accusation the meaning is not very easy to be found. No instrument of correction is more proper than another, but as it is better adapted to produce present pain without lasting mischief. Whatever were his instruments, no lasting mischief has ensued; and therefore. however unusual, in hands so cautious they were proper. It has been objected, that he admits the charge of cruelty, by producing no evidence to confute. Let it be considered, that his scholars are either dispersed at large in the world or continue to inhabit the place in which they were bred. Those who are dispersed can not be found; those who remain are the sons of his persecutors, and are not likely to support a man to whom their fathers are enemies. If it be supposed that the enmity of their fathers proves the justice of the charge, it must be considered how often experience shows us, that men who are angry on one ground will accuse on another; with how little kindness in a town of low trade, a man who lives by learning is regarded; and how implicitly, where the inhabitants are not very rich, a rich man is hearkened to and followed. In a place like Campbell-town, it is easy for one of the principal inhabitants to make a party. It is easy for that party to heat themselves with imaginary grievances. It is easy for them to oppress a man poorer than themselves; and natural to assert the dignity of riches, by persisting in oppression."

Upon the same subject, Mr. Boswell also observed, "It is a very delicate matter to interfere between a master and his scholars; nor do I see how you can fix the degree of severity that a master may use." JOHNSON. "Why, sir, till you can fix the degree of obstinacy and negligence of the scholars, you can not fix the degree of severity of the master. Severity must be continued until obstinacy be subdued and negligence be cured."

(To be continued.)

XII. BERNARD OVERBERG.

Bernard Overberg, whose life is a beautiful illustration of the value of a devout and self-denying teacher of teachers, was born in the village of Hoekel, in the province of Westphalia, Prussia, in May 1754. His father was a pedlar, but gave his son the best opportunities of education in the village school, and afterwards in the Gymnasium at Rheine, for which he was fitted by a clergyman in a neighboring town, to whom he walked every day in spite of bad roads and weather. As the development of his faculties was not rapid, and his attainments on entering the Gymnasium were not up to the average standard, he was put near the foot of his class. This only stimulated his industry, and at the end of the first year, he was before all his companions in religious knowledge, correct conduct, and Latin, and equal to the best in other studies. After finishing his gymnasial course, he commenced his philosophical and theological studies in the Catholic Episcopal Seminary in Munster, paying his way by his earnings as tutor in a gentleman's family in the town. In 1780, he was ordained to the ministry, and first officiated as priest at Voltlage, within a few miles of his birthplace.

In 1780, he became officiating vicar of Everswinkel, and many even yet can remember his powers as a spiritual guide and teacher, and the bus-ngs which attended him. His chief anxiety was for the religious education of the children of the parish, and this at his request was wholly given up to him by the rector. In three years his manner of teaching became so perfect, that the minister Prince Furstenberg was induced to think of appointing him to the normal school* at Munster. But first he determined to hear the teaching himself, and getting into his carriage on Sunday, when he knew Overberg would catechise, he told the post boys to bring him to Everswinkel exactly at two o'clock. He thus got into the church unobserved, and listening unseen, found his expectation exceeded, and therefore offered the situation immediately. Overberg's disposition and humility inclined him to remain amongst the countrymen who were attached to him, but the offer was really a command from his vicar-general, (which Furstenberg then was,) and he had only to comply. On being desired to name his own salary, his modesty asked only for 200 thalers, (about $150,) with board and lodging in the episcopal seminary at Munster. He entered this, March, 1783, and here he died as principal, in 1826.

The leading object of his intercourse with all, both old and young, with whom he came in contact, was to implant and cultivate a spiritual principle; a principle coming from God's spirit and continually nourished by it alone, whilst he believed the means for obtaining this to be clear and impressive views of the truth and power of the Christian religion laid deeply in the character during childhood. The relation and intercourse between God and man either by natural or revealed means was the great object of his instruction, and being so pervaded by this godliness himself, his pupils became in some degree warmed by it. "Only that which comes from the heart can reach the heart," was a favorite saying of his; and all who have heard him, agree in stating that a tone of cheerful piety seemed to

accompany the studies, even the common reading, writing, arithmetic, mensuration, &c., whilst the intellectual faculties thus developed were more easily brought under the power of the will, when the moral faculties were in healthy exercise. Catechetical as his instruction generally was, he avoided the extreme in which it is now used and its attendant error of cultivating the memory of children at the expense of their reflecting, and still more, their moral powers. He never began with abstract truths of religion, &c., but with the imagination and actual experience of the children; so that the answer was not mere words or notions of the memory, but the enlargement of existing ideas. His object was not so much to give information, as to give such information and such views of things, as would draw out all the good and amiable points of the character, and repress the contrary.

The office of schoolmaster in the district of Munster, was at that time performed in the more populous parishes by men who, intending to be clergymen, had gone through a part of the studies at the gymnasium, and then stopped for want of money, talents, or other causes; but in the smaller parishes and scattered country places, it was performed by laborers, who, teaching in winter, returned to their work in summer. By far the greatest number of them were, of course, very ignorant and unfit for any intelligent teaching; but their pay was poor in proportion, and many, having no room, made use of some bakehouse, or even an old chapel without a stove, in the cold nights of winter. To tempt them to an internal improvement, Furstenberg began with an external one; and for this, commissioned Overberg to visit all the village schools of the district. Some of the bad, superfluous, and unlicensed were closed, and instead of two or three inconvenient, one more convenient erected; then every schoolmaster who offered himself for examination, and passed it creditably, had a yearly salary secured him of twenty, thirty, or even forty thalers, (each about 75 cents,) according to the population of his parish. The examination was to be repeated every three years, and they who wished to improve themselves were advised to attend the normal school at Munster. The expenses of this attendance were all to be paid for them; and in order that there might be no material omission of their school duties, the attendance at the normal school was restricted to the usual time of their vacation, from August 21, to the beginning of November. On this being settled, from twenty to thirty old schoolmasters attended Overberg, and most thoroughly exercised his patience and charity, by their indescribable helplessness and incapacity for learning; from nine to twelve, and from two to five, he instructed them in the principles of teaching, in religion, in Scripture history, in reading, writing, and arithmetic. He carefully prepared himself for this, by one and a half hour's study; and he spent the rest of the day in reading with the most backward. Hopeless as all this trouble seemed at first, in a few years the result was rich in blessings.

As was mentioned in the introduction, Overberg's zeal for the welfare of the ignorant poor produced in many others a similar feeling. Pupils soon came to his lectures whose fervent wish was to become efficient Christian teachers. The example of these influenced some of the more indolent; and many of the schoolmasters attended him, not only as long as government paid their expenses, but for many years afterwards. Ignorant and unpolished as were the greatest number of them at first, they scarcely ever required a reproof from him, feeling respect and affection when they saw his estimable character shine forth in its simplicity and friendliness. Their studies commenced with prayer; and the dullest heart must have been, in some degree, moved when Overberg entered and began, "Come, Holy Ghost;" whilst his simplicity of manner, his want of all appearance of study or learning, with his power and fervor, struck even those most accustomed to preaching. The source from whence he obtained all this may be seen from a rule in his diary.

"Let in every thing, 1st, the love of God be the moving principle; 2d, the will of God the guiding clue; 3d, the glory of God the end. When this is done, then wilt thou walk before God and be perfect." Or more conscisely, "Do and suffer every thing from love to God, according to God's will and God's glory." Again, November 6, 1791, at the end of the course, having thanked God for his support, &c., he adds, "In previous years I felt more ashamed, having more reliance on my own powers, and more inclination to the vanity of pleasing men. This year

Thou hast given me a stronger feeling of my weakness, more confidence in Thee, and greater desire to please Thee only."

His extreme care in previous preparation, even for teaching the children of the free school, will be seen by a subsequent extract; and the following shows clearly the great conscientiousness with which he performed the details of his daily instruction, and particularly that of the young communicants.

"April 12, 1790. I thank Thee, O Father in heaven, for the strength Thou gavest me when instructing the children yesterday for the first communion; support, O Jesus, those whom Thou hast thus fed with thy flesh and blood; supply by thy grace what through my fault or theirs was displeasing in their hearts to Thee; and help me to avoid those faults in future. I began too late to watch their conduct, in order to know their hearts, and so prepare them for thy advent. I persuaded myself I could make amends by my instruction, though this evidently requires observation of the character before. Thou knowest, indeed, that I often strove to instruct them from the purest motives; but how often, when teaching, did vanity come in, and how oft get command over me! I frequently observed this at the time, and, struggling against it, got confused, obscure, and injured the children in consequence. Often, when led captive by vanity, I said something or left something unsaid, which I would not have done, had thy glory and the salvation of the children been my sole object; and this was particularly the case when strangers were present.

"Writing out as much as possible previously was some safeguard against this folly, though it took away from the freedom and more touching simplicity of the lecture.

"My getting confused and annoyed when the instruction did not go on as I wished, showed me what mixed motives yet governed me; my satisfaction depended not so much on my own conduct, as on the result of the satisfaction it gave to others; and although I struggled against all of this, it was not so earnestly as I ought to have done. O Lord Jesus, have mercy upon me, and blot out all my misdeeds! Make me a clean heart, and so shall I teach thy babes thy way!

"In order to avoid these faults in future, I will now take down the names of those who will probably attend the communion next year; so that I may observe the state of their heart and mind, during the whole time. I will pray for them; and when I think it will do good, I will mention them in the public prayers of the school. But, Lord, how can I have this singleness of view? Thou must give it, and the strength to act accordingly; I will fight, unwilling though I be, and do Thou grant that I may endure the fight to the end!"

The above applies to the Lorraine free school, to which he paid constant attention when conducting the normal school. But to recur to his plan of teaching in this, we may remark his practice of explaining and illustrating, by examples, the principles of moral philosophy on which teachers ought to proceed. His power of illustrative narration being very great, he could, when necessary, fill up the details of the picture so faithfully, that every one entered into it, and would probably recollect some example from their own experience. Once, when illustrating some error in teaching, an old schoolmaster, struck with the ideal picture, cried out in low German, "Oh, Mr. Overberg, that is just what is done amongst us!" Frequently his pictures were highly comical, but respect for him was such as to prevent any one giving way to their feelings. In short, such was the varied talent shown in his lectures, that persons quite indifferent to the subject would crowd to hear them.

Overberg was an admirer of nature in the highest and noblest sense, and in the wonders of creation he saw a representation of the Deity. Every leaf, every flower was to him a proof of the power, and goodness, and wisdom of God, and he must have accustomed himself to raise his views from the creature to the Creator from his earliest years, it having, as he said, become a second nature to him. He earnestly impressed upon the teachers the pious consideration of the works of creation, giving them directions for it, and urging them to turn the attention of the children to them as early as possible. He thought that a teacher in the country ought occasionally to give his lessons in the open air, and so teach the children to observe for themselves the end for which every thing is made, and how perfectly

it is adapted to it; whilst views of the power and wisdom of God should thus be brought into lectures on religion.

Valuable, however, as was the information given to the pupils, it was not more so than the example of friendliness, humility, and patience which Overberg showed toward themselves; as when having twice clearly explained some very simple thing, he would quietly go over it again, if the answer of the pupil made it probable it was not clearly comprehended, and thus the other pupils would see in practice what is meant by adapting a subject to the powers of comprehension of the hearer without omitting any principle.

The instruction was always closed by one of the church hymns to which he was very partial, and professed even in one of his latter years to have been much benefitted by the German hymn in the evening service of a village church. "Were I an officiating priest, (said he,) I would always use such a German litany instead of a Latin vesper. How impressive is that one beginning 'Have pity, Lord,'" &c.

At the conclusion of the course, the students were examined, and provided with situations, and subsequently promoted according to their merit.

Thus was he, under God, not merely the founder but the supporter of a system of education rich in blessings to his country, but besides this he had also the peculiar merit of educating a class of female teachers to which probably there is nothing similar elsewhere. Young women, not from necessity but piety, attended some of his lectures in the normal school, and his catechising in the free school, and the majority resisting subsequent temptations to give up their labors, continued devoted to them through life. These were appointed to different girls' schools, and the results were so good, and subsequently so notorious, that many of them were sent for into other countries, whilst others as readers or governesses became blessings to private families. He used to say that women made better teachers than men, and he regretted exceedingly that there was no normal school established for them at the same time with that at Büren.

His instruction in the Lorraine cloister school consisted in some hours being given three times a week to religion, Bible history, and arithmetic; to this, and particularly to the catechising the children in the church every Sunday, there came persons of all ranks, thinking that they then saw in Overberg a faithful follower of Him who said, "Suffer little children," &c. How important he felt this instruction of the children to be, may be seen from the following extract from his journal:

"January 15, 1790. This morning I went into the school without sufficient preparation. O God! help me to improve in this. It is a delusion to imagine that any thing is more necessary or ought to be preferred to this; want of preparation draws many faults after it, the instruction becomes dry, confused, without point, rambling; hence the children are puzzled, their attention distracted, and the employment becomes disagreeable to them and myself. I must also be very careful not to go too much into details; into too extended views, and become too learned for the little ones; to comprehend and retain one good point is better for them than to hear ten and understand none well, or to miss the most important whilst thinking of the others.

"O God, help me ever more and more to imitate the manner of teaching of thy beloved Son, so divinely simple, short, clear, and easily remembered. Grant, that before I propose any thing to the children, I may ask myself, 'Is it necessary? Is it useful? Is there not something more useful, which ought to be preferred to it? Is it sufficiently comprehensible? What is my object in proposing it? Will it, when known, give them only an appearance of learning, &c.? If so, away with it.'"

"February 7, 1790. Thou art teaching me, O my God, more and more for my own experience, that of myself I can do nothing. When I fear that the teaching which Thou hast committed to me will not go on well, then I am surprised at its success, and the contrary happens when I say, 'this time I shall succeed.' Is not this an intimation from Thee, not to trust on my own strength? May thy grace help me to translate this into practice. O God, how many are thy favors; even to-day I observed that Thou takest away my usual impediment to clear and loud utterance, whenever I have to speak in the church to the children. Ever

grant me, O Lord, the grace, (undeserving though I be, from having so frequently withstood it,) the grace, that in all I do, particularly as regards these children, I may look to thy will alone. O Father, my Father in Christ Jesus, do Thou be with me, that I do not make the instruction of thy little ones needlessly difficult, giving them hard food instead of milk; chaff, instead of corn; attending too much to some, and neglecting others. Thou hast permitted me to enter upon a new way of instruction; if it be not better, if it be not thy will that I should go on in it, do thou call me back; if it be thy will, O make it so clear to me, that I err not, and lead the children into by-paths, from which I must lead them back again. I am unworthy of thy favor, but Thou wilt not turn away from these little ones, sanctified by the blood of thy Son, and hence I rely on thy assistance May I be wholly thine, and so do more for thy honor and the good of others. Oh, may not the trust which others place in me be disappointed."

Thus did Overberg perform the apparently simple and easy duty of teaching children with a deep and holy earnestness, as in God's sight, and in the strength obtained by prayer. He knew and confessed what an important charge is the education of youth in prayer and filial intercourse with God.

Such was his earnestness in the common daily teaching, and the blessings for which he prayed, attended it, not merely on the sensitive hearts of the young, but it softened also many hardened by age; still his earnestness was doubled when the time for the sacrament drew near. He latterly took down, as we have said before, the names of the probable communicants a year before, and began carefully to observe the state of each, and direct them accordingly; the more immediate instruction was given during an hour and a half daily during Lent, till the Third Sunday after Easter. He then gave them a compendium of the doctrines of Christianity, and to guard himself against digressions, he wrote out his lectures at length daily. These were attended by many adult hearers, particularly of the theological students, many of whom carried away the matter in their note books, however little they might be warmed by all the piety which animated the author. On Thursdays and Sundays during Lent, no strangers were admitted, because these days were devoted to repetition and examination in previous lessons. Besides this public teaching, he instructed, exhorted, and warned them unceasingly in private, according to the character and circumstances of each. He led them as their confessor, to reflect on the truths of salvation, to prayer, and particularly to careful examination of conscience.

From time to time he prayed in the school for these communicants, and as the day approached, he sent for the parents, put before them their duty to their children, particularly that of personal example, and he made them promise to fullfil it. Whilst the children promised in writing that they would walk according to the gospel, avoiding the danger to their faith and virtue, and using the means of grace; for himself, his earnest prayer was that he might be influenced in the selection of candidates, by nothing but their piety, and such was his zeal and anxiety in all this, that he frequently had some illness when it was over.

During the course of the year, after the first sacrament, the communicants were required to go to the Lord's table, from time to time together, and he always prepared them for it.

Thus had he labored in this, and the weekly instruction of the children for twenty-seven years, in the school of the Lorraine cloister; when this was closed, and the school made parochial, and transferred to the parish priest, who relieved him from the labor.

The following is a specimen of his manner of addressing his normal pupils:

My beloved friends:—If you cherish sentiments of true benevolence, if the welfare of your scholars be of any importance or value to you, engrave deeply on your hearts the recommendations which I am about to address to you, and in the performance of the duties of your vocation, have them constantly presented to your mind.

1. *If you desire to honor God, let there be no levity or carelessness in your conduct.*

You can not use too much caution in this respect in the presence of your pupils; their eyes are always directed to you, and are certainly far more penetrating than is generally imagined. They discover in you faults which you are not conscious of yourself, and these faults often shock them more, and render you more contemptible in their eyes, than other and much greater ones would do in the eyes of men of your own age. Forget yourself but in a single instance, and you may produce on them an impression, deeper than all your good lessons, and all the efforts you have made for them. Be careful, then, even in the smallest things, as much as possible, not only not to give them a bad example, but even an example which can not in all points be safely followed; for your example acts with great power on their character; it may produce immense good, or infinitely greater evil. Children pay more attention to the example of their superiors than to their lessons, however good and salutary they may be; and since they have not discernment to distinguish a slight and very excusable fault from one much greater, or a weakness natural to humanity from an action intentionally bad, they are often less shocked at the last than at the first. It is for this reason that we never can be *too prudent* in the presence of such spectators and such judges. It is precisely in *this* company, more than in any other, that it is necessary to be *most watchful over one's self;* and their society is, consequently, an excellent means of self-improvement. Avoid, therefore, not only those vices which would cover you with shame in the eyes of all good men, but also those defects and weaknesses which you would not like your pupils to imitate, if even your equals would not notice them.

2. *Teach, on all occasions, not only by your words, but by your conduct and habits.*

Instruction thus given, is for your pupils, not only the most efficacious, but also the most easy. Thus, would you accustom them to neatness? let them see in you this good habit, while receiving your instructions on this subject; if you are yourself slovenly in your clothes and in your person, what will they think of your lessons on neatness? Would you form them to continuous activity? never be idle yourself; work cheerfully; and never let them see you without occupation. Would you introduce order in your school? never let them see any disorder, either in your own person or your affairs. Let good order be obvious in the class, in your habitation, in your household. He who throws every thing into confusion, and who, when he wants any thing, has sometimes to seek it in one corner, and sometimes in another, gives to his scholars a very sorry example of good order. Would you wish to teach them truth and fidelity? never let any thing contrary to truth proceed from your own mouth, even in playfulness, lest this playfulness be misunderstood; never make a promise or a threat which you can not or will not accomplish; never leave a promise or a threat unperformed which you have made unconditionally, lest a motive should be attributed to you which would place you in the eyes of your pupils in the shade of suspicion of want of integrity.

3 *Inspire in your pupils obedience to, and respect for, their relations and their superiors; and take particular care not to weaken the consideration which children ought to have for their parents.*

Do not those tutors commit a great sin, who never display more eloquence than when they chatter in the presence of your pupils on the awkwardness and ignorance of men of a certain age, or of old men, because they have not learned this or that thing which is now taught at the schools? By acting thus, they not only deprive their children of all respect for their parents, which leads to the most fatal consequences, but they also inspire them with an insupportable pride, which makes them despise all that may be said or done by those older than themselves.

4. *Let the fear of God be visible in your actions, and in your manner on all occasions, especially in teaching religion.*

Manifest always the most serious displeasure when your pupils say or do any thing contrary to the holy reverence which we owe to God, and take care yourself not to pronounce the name of God or of your Saviour with levity. Seek to have your own heart deeply impressed when you speak of truths of great importance; for example, of the paternal goodness of God toward men; of his mercy

to sinners; in the sufferings and death of Christ; of the obedience and love which led him to submit to these sufferings and this death; of the favor which he has procured for us; of the ordinances which he has instituted in remembrance of his death; of the great rewards and terrible punishments of eternity, &c. Your emotion will manifest itself in your exterior deportment; it will render your words impressive, and will awaken like emotions in the hearts of your auditors. A simple tear which may start in the eye of the master, and which is not the effect of art, but the involuntary expression of a heart truly softened and penetrated by the importance of the subject, acts very powerfully on the hearts of children, and often produces in them impressions and resolutions which the most lively representations could not have effected.

5. *By active compassion for the misfortunes of your neighbors, you can excite in the children pity, and teach them the right manner of sympathizing with their fellow creatures, in joy and in adversity.*

Your manner of conducting yourself toward your pupils, will contribute much toward making them either courteous and charitable men, or morose and indifferent to their duties. If you act toward them as a good father; if all your conduct shows them your love; that you labor with all your power for their real good, and to be useful to them as much as possible; and (because you love them) that you willingly render them services, and procure pleasures for them, (which may be often in themselves the merest trifles,) you will awaken in many of them, love, and the desire to oblige, for *love is contagious.* They will learn also from you, to render voluntary service to their companions and to others; this will be the result of your example. *In a word, each virtue will appear to them more amiable, and more worthy of being imitated; and you will be more sure than ever, that they will seek to acquire it, if it be manifest in your conduct.*

Oh, you can do much, yes, very much, to form the hearts of your pupils, if you will instruct them at the same time by your life and by your precepts. The best of opportunities is offered to you; they are confided to your care *precisely* at the age when the instinct of curiosity and imitation acts with the greatest force; when you have them daily with you, and can thus instill gradually according to their capacity, good doctrines and good sentiments. *A drop which falls incessantly wears the hardest stones;* and much more easily can impressions be made on the unformed characters of children. The faults which perhaps they may have when you enter into relation with them, are not so deeply rooted that they can not be removed, if you give to the work attention and zeal. You can really produce more substantial good in their hearts, than their pastors can at a more advanced age. To destroy rooted vices is a difficult task, and often impossible to be accomplished, whatever efforts may be tried; but to prevent them, to stifle them in their commencement, to fashion the mind when it is still pliant; this is a much easier work, and one which, by the blessing of God, will succeed, if the master teach by his actions, as well as by precept. Do not shrink from the task; it is the most noble, the most respectable, the most imposing that you can undertake.

Do not allow yourself to be frightened or arrested in a work so excellent, by the difficulties which it presents, many of which exist only in your imagination. The duty to which I now exhort you, that of leading a life irreproachable and edifying before God and before the children, is a duty obligatory upon you as Christians; it ought to be of importance to you even if you should not be schoolmasters; but *as such*, as directors of youth, who are to be formed by your teaching and by your example, you are *doubly* engaged to this duty.

If, then, you love yourselves; if you love these little ones confided to your care, and placed under your responsibility; if you love Him who is their Saviour and yours, follow also his example on this point, teaching like him by words and actions; be to your pupils on all occasions, "a pattern of good works." (Titus ii. 7.) "Let your light so shine before them, that they, seeing your good works, may do likewise, and with you, glorify your Father who is in heaven."

We add a few suggestions in the same spirit by Zeller, and Beckendorf—translated from "Le Miroir des Instituteurs, ou Conseils sur l' Education."

XIII. THOUGHTS ON EDUCATION.

BY HERBERT SPENCER.

(Continued from page 512, No. XXVII.)

III. INTELLECTUAL EDUCATION AND STUDIES.

DESIRE OF OLD METHODS.

1. The suppression of every error is commonly followed by a temporary ascendency of the contrary one; and it so happened, that after the ages when physical development alone was aimed at, there came an age when culture of the mind was the sole solicitude—when children had lesson-books put before them at between two and three years old—when school-hours were protracted, and the getting of knowledge was thought the one thing needful. As, further, it usually happens, that after one of these reactions the next advance is achieved by co-ordinating the antagonist errors, and perceiving that they are opposite sides of one truth; so we are now coming to the conviction that body and mind must both be cared for, and the whole being unfolded. The forcing system has been in great measure given up, and precocity is discouraged. People are beginning to see that the first requisite to success in life, is to be a good animal. The best brain is found of little service, if there be not enough vital energy to work it; and hence to obtain the one by sacrificing the source of the other, is now considered a folly—a folly which the eventual failure of juvenile prodigies constantly illustrates. Thus we are discovering the wisdom of the saying, that one secret in education is "to know how wisely to lose time."

The once universal practice of learning by rote, is daily falling more into discredit. All modern authorities condemn the old mechanical way of teaching the alphabet. The multiplication table is now frequently taught experimentally. In the acquirement of languages, the grammar-school plan is being superseded by plans based on the spontaneous process followed by the child in gaining its mother tongue.

Along with rote-teaching, is declining also the nearly allied teaching by rules. The particulars first, and then the generalization, is the new method—a method, as the Battersea School Reports remark, which, though "the reverse of the method usually followed which consists in giving the pupil the rule first," is yet proved by experience to be the right one. Rule-teaching is now condemned as imparting a merely empirical knowledge—as producing an appearance of understanding without the reality. To give the net product of inquiry, without the inquiry that leads to it, is found to be both enervating and inefficient. General truths to be of due and permanent use, must be earned. "Easy come easy go," is a saying as applicable to knowledge as to wealth. While rules, lying isolated

in the mind—not joined to its other contents as outgrowths from them—are continually forgotten, the principles which those rules express piecemeal, become, when once reached by the understanding, enduring possessions. While the rule-taught youth is at sea when beyond his rules, the youth instructed in principles solves a new case as readily as an old one. Between a mind of rules and a mind of principles, there exists a difference such as that between a confused heap of materials, and the same materials organized into a complete whole, with all its parts bound together. Of which types this last has not only the advantage that its constituent parts are better retained, but the much greater advantage, that it forms an efficient agent for inquiry, for independent thought, for discovery—ends for which the first is useless. Nor let it be supposed that this is a simile only: it is the literal truth. The union of facts into generalizations *is* the organization of knowledge, whether considered as an objective phenomenon, or a subjective one: and the mental grasp may be measured by the extent to which this organization is carried.

From the substitution of principles for rules, and the necessarily co-ordinate practice of leaving abstractions untaught until the mind has been familiarized with the facts from which they are abstracted, has resulted the postponement of some once early studies to a late period. This is exemplified in the abandonment of that intensely stupid custom, the teaching of grammar to children. As M. Marcel says:—"It may without hesitation be affirmed that grammar is not the stepping-stone, but the finishing instrument." As Mr. Wyse argues:—"Grammar and Syntax are a collection of laws and rules. Rules are gathered from practice; they are the results of induction to which we come by long observation and comparison of facts.

INTRODUCTION OF NEW METHOD.

2. After long ages of blindness men are at last seeing that the spontaneous activity of the observing faculties in children has a meaning and a use. What was once thought mere purposeless action, or play, or mischief, as the case might be, is now recognized as the process of acquiring a knowledge on which all after-knowledge is based. Hence the well-conceived but ill-conducted system of *object-lessons*. The saying of Bacon, that physics is the mother of sciences, has come to have a meaning in education. Without an accurate acquaintance with the visible and tangible properties of things, our conceptions must be erroneous, our inferences fallacious, and our operations unsuccessful. "The education of the senses neglected, all after education partakes of a drowsiness, a haziness, an insufficiency which it is impossible to cure."

While the old method of presenting truths in the abstract has been falling out of use, there has been a corresponding adoption of the new method of presenting them in the concrete. The rudimentary facts of exact science are now being learnt by direct intuition, as textures, and tastes, and colors are learnt. Employing the ball-frame for first lessons in arithmetic exemplifies this. It is well illustrated, too, in Professor De Morgan's mode of explaining the decimal notation. M. Marcel, rightly repudiating the old system of tables, teaches weights and measures by referring to the actual yard and foot, pound and ounce, gallon and quart; and lets the discovery of their relationships be experimental. The use of geographical models and models of the regular bodies, &c., as introductory to geography and geometry respectively, are facts of the same class. Manifestly a common trait of these methods is, that they carry each child's

mind through a process like that which the mind of humanity at large has gone through. The truths of number, of form, of relationship in position, were all originally drawn from objects; and to present these truths to the child in the concrete is to let him learn them as the race learnt them. By-and-by, perhaps, it will be seen that he can not possibly learn them in any other way; for that if he is made to repeat them as abstractions, the abstractions can have no meaning for him, until he finds that they are simply statements of what he intuitively discerns.

But of all the changes taking place, the most significant is the growing desire to make the acquirement of knowledge pleasurable rather than painful—a desire based on the more or less distinct perception that at each age the intellectual action which a child likes is a healthful one for it; and conversely. There is a spreading opinion that the rise of an appetite for any kind of knowledge implies that the unfolding mind has become fit to assimilate it, and needs it for the purposes of growth; and that on the other hand, the disgust felt towards any kind of knowledge is a sign either that it is prematurely presented, or that it is presented in an indigestible form. Hence the efforts to make early education amusing, and all education interesting. Hence the lectures on the value of play. Hence the defense of nursery rhymes, and fairy tales. Daily we more and more conform our plans to juvenile opinion. Does the child like this or that kind of teaching? does he take to it? we constantly ask. "His natural desire of variety should be indulged," says M. Marcel; "and the gratification of his curiosity should be combined with his improvement." "Lessons," he again remarks, "should cease before the child evinces symptoms of weariness." And so with later education. Short breaks during school-hours, excursions into the country, amusing lectures, choral songs—in these and many like traits, the change may be discerned. Asceticism is disappearing out of education as out of life; and the usual test of political legislation—its tendency to promote happiness—is beginning to be, in a great degree, the test of legislation for the school and the nursery.

THE ORDER AND METHOD OF NATURE TO BE FOLLOWED.

3. There is a certain sequence in which the faculties spontaneously develop, and a certain kind of knowledge which each requires during its development; and that it is for us to ascertain this sequence, and supply this knowledge. A nebulous perception of it now prevails among teachers; and it is daily more insisted on in educational works. "The method of nature is the archetype of all methods," says M. Marcel. "The vital principle in the pursuit is to enable the pupil rightly to instruct himself," writes Mr. Wyse. The more science familiarizes us with the constitution of things the more do we see in them an inherent self-sufficingness. A higher knowledge tends continually to limit our interference with the processes of life. As in medicine the old "heroic treatment" has given place to mild treatment, and often no treatment save a normal regimen—as we have found that it is not needful to mould the bodies of babes by bandaging them in papoose fashion or otherwise—as in gaols it is being discovered that no cunningly devised discipline of ours is so efficient in producing reformation as the natural discipline, the making prisoners maintain themselves by productive labor; so in education we are finding that success is to be achieved only by rendering our measures subservient to that spontaneous unfolding which all minds go through in their progress to maturity.

GUIDING PRINCIPLES OF EDUCATION.

4. Though it is not possible for a scheme of culture to be perfected either in matter or form until a rational Psychology has been established, it is possible, with the aid of certain guiding principles, to make empirical approximations towards a perfect scheme. To prepare the way for further research we will now specify these principles:—

(1.) That in education we should proceed from the simple to the complex is a truth which has always been to some extent acted upon; not professedly, indeed, nor by any means consistently. The mind grows. Like all things that grow it progresses from the homogeneous to the heterogeneous; and a normal training system being an objective counterpart of this subjective process, must exhibit the like progression. Moreover, regarding it from this point of view, we may see that this formula has much wider applications than at first appears. For its *rationale* involves not only that we should proceed from the single to the combined in the teaching of each branch of knowledge; but that we should do the like with knowledge as a whole. As the mind, consisting at first of but few active faculties; has its later-completed faculties successively awakened, and ultimately comes to have all its faculties in simultaneous action; it follows that our teaching should begin with but few subjects at once, and successively adding to these, should finally carry on all subjects abreast—that not only in its details should education proceed from the simple to the complex, but in its *ensemble* also.

(2.) To say that our lessons ought to start from the concrete and end in the abstract, may be considered as in part a repetition of the foregoing. Nevetheless it is a maxim that needs to be stated: if with no other view, then with the view of showing in certain cases what are truly the simple and the complex. For unfortunately there has been much misunderstanding on this point. General formulas which men have devised to express groups of details, and which have severally simplified their conceptions by uniting many facts into one fact, they have supposed must simplify the conceptions of the child also: quite forgetting that a generalization is simple only in comparison with the whole mass of particular truths it comprehends—that it is more complex than any one of these truths taken singly—that only after many of these single truths have been acquired does the generalization ease the memory and help the reason—and that to the child not possessing these single truths it is necessarily a mystery. Thus confounding two kinds of simplification, teachers have constantly erred by setting out with "first principles:" a proceeding essentially, though not apparently, at variance with the primary rule; which implies that the mind should be introduced to principles through the medium of examples, and so should be led from the particular to the general—from the concrete to the abstract.

(3.) The education of the child must accord both in mode and arrangement with the education of mankind as considered historically; or in other words, the genesis of knowledge in the individual must follow the same course as the genesis of knowledge in the race.

It is alike provable that the historical sequence was, in its main outlines, a necessary one; and that the causes which determined it apply to the child as to the race. Not to specify these causes in detail, it will suffice here to point out that as the mind of humanity placed in the midst of phenomena and striving to

comprehend them, has, after endless comparisons, speculations, experiments, and theories, reached its present knowledge of each subject by a specific route; it may rationally be inferred that the relationship between mind and phenomena is such as to prevent this knowledge from being reached by any other route; and that as each child's mind stands in this same relationship to phenomena, they can be accessible to it only through the same route. Hence in deciding upon the right method of education, an inquiry into the method of civilization will help to guide us.

(4.) One of the conclusions to which such an inquiry leads is, that in each branch of instruction we should proceed from the empirical to the rational. A leading fact in human progress is, that every science is evolved out of its corresponding art. It results from the necessity we are under, both individually and as a race, of reaching the abstract by way of the concrete, that there must be practice and an accruing experience with its empirical generalizations, before there can be science. Science is organized knowledge; and before knowledge can be organized, some of it must first be possessed. Every study, therefore, should have a purely experimental introduction; and only after an ample fund of observations has been accumulated, should reasoning begin. As illustrative applications of this rule, we may instance the modern course of placing grammar, not before language, but after it; or the ordinary custom of prefacing perspective by practical drawing. By-and-by further applications of it will be indicated.

(5.) A second corollary from the foregoing general principle, and one which can not be too strenuously insisted upon, is, that in education the process of self-development should be encouraged to the fullest extent. Children should be led to make their own investigations, and to draw their own inferences. They should be *told* as little as possible, and induced to *discover* as much as possible. Humanity has progressed solely by self-instruction; and that to achieve the best results, each mind must progress somewhat after the same fashion, is continually proved by the marked success of self-made men. Those who have been brought up under the ordinary school-drill, and have carried away with them the idea that education is practicable only in that style, will think it hopeless to make children their own teachers. If, however, they will call to mind that the all-important knowledge of surrounding objects which a child gets in its early years is got without help—if they will remember that the child is self-taught in the use of its mother tongue—if they will estimate the amount of that experience of life, that out-of-school wisdom, which every boy gathers for himself—if they will mark the unusual intelligence of the uncared-for London *gamin*, as shown in all the directions in which his faculties have been tasked—if further, they will think how many minds have struggled up unaided, not only through the mysteries of our irrationally-planned *curriculum*, but through hosts of other obstacles besides; they will find it a not unreasonable conclusion, that if the subjects be put before him in right order and right form, any pupil of ordinary capacity will surmount his successive difficulties with but little assistance. Who indeed can watch the ceaseless observation, and inquiry, and inference going on in a child's mind, or listen to its acute remarks on matters within the range of its faculties, without perceiving that these powers which it manifests, if brought to bear systematically upon any studies *within the same range*, would readily master them without help?

(6.) As a final test by which to judge any plan of culture, should come the

question,—Does it create a pleasurable excitement in the pupils? When in doubt whether a particular mode or arrangement is or is not more in harmony with the foregoing principles than some other, we may safely abide by this criterion. Even when, as considered theoretically, the proposed course seems the best, yet if it produce no interest, or less interest than another course, we should relinquish it; for a child's intellectual instincts are more trustworthy than our reasonings. In respect to the knowing faculties, we may confidently trust in the general law, that under normal conditions, healthful action is pleasurable, while action which gives pain is not healthful. Though at present very incompletely conformed to by the emotional nature, yet by the intellectual nature, or at least by those parts of it which the child exhibits, this law is almost wholly conformed to. The repugnances to this and that study which vex the ordinary teacher, are not innate, but result from his unwise system. Fellenberg says, "Experience has taught me that *indolence* in young persons is so directly opposite to their natural disposition to activity, that unless it is the consequence of bad education, it is almost invariably connected with some constitutional defect." And the spontaneous activity to which children are thus prone, is simply the pursuit of those pleasures which the healthful exercise of the faculties gives.

APPLICATION OF PRINCIPLE TO PRACTICE.

5. It was the opinion of Pestalozzi—an opinion which has ever since his day been gaining ground—that education of some kind should begin from the cradle. Whoever has watched with any discernment, the wide-eyed gaze of the infant at surrounding objects, knows very well that education *does* begin thus early, whether we intend it or not; and that these fingerings and suckings of every thing it can lay hold of, these open-mouthed listenings to every sound, are the first steps in the series which ends in the discovery of unseen planets, the invention of calculating engines, the production of great paintings, or the composition of symphonies and operas. This activity of the faculties from the very first being spontaneous and inevitable, the question is whether we shall supply in due variety the materials on which they may exercise themselves; and to the question so put, none but an affirmative answer can be given.

INTUITIONAL EXERCISE OF THE PERCEPTIONS.

6. The earliest impressions which the mind can assimilate, are those given to it by the undecomposable sensations—resistance, light, sound, &c. Manifestly decomposable states of consciousness can not exist before the states of consciousness out of which they are composed. There can be no idea of form until some familiarity with light in its gradations and qualities, or resistance in its different intensities, has been acquired; for, as has been long known, we recognize visible form by means of varieties of light, and tangible form by means of varieties of resistance. Similarly, no articulate sound is cognizable until the inarticulate sounds which go to make it up have been learned. And thus must it be in every other case. Following, therefore, the necessary law of progression from the simple to the complex, we should provide for the infant a sufficiency of objects presenting different degrees and kinds of resistance, a sufficiency of objects reflecting different amounts and qualities of light, and a sufficiency of sounds contrasted in their loudness, their pitch and their *timbre*. How fully this *à priori* conclusion is confirmed by infantile instincts all will see on being

reminded of the delight which every young child has in biting its toys, in feeling its brother's bright jacket-buttons, and pulling papa's whiskers—how absorbed it becomes in gazing at any gaudily painted object, to which it applies the word "pretty," when it can pronounce it, wholly in virtue of the bright colors—and how its face broadens into a laugh at the tattlings of its nurse, the snapping of a visitor's fingers, or any sound which it has not before heard. Fortunately, the ordinary practices of the nursery fulfill these early requirements of education to a considerable degree. Much, however, remains to be done; and it is of more importance that it should be done than at first appears. Every faculty during the period of its greatest activity—the period in which it is spontaneously evolving itself—is capable of receiving more vivid impressions than at any other period. Moreover, as these simplest elements must eventually be mastered, and as the mastery of them whenever achieved must take time, it becomes an economy of time to occupy this first stage of childhood, during which no other intellectual action is possible, in gaining a complete familiarity with them in all their modifications. Add to which, that both temper and health will be improved by the continual gratification resulting from a due supply of these impressions which every child so greedily assimilates. Space, could it be spared, might here be well filled by some suggestions towards a more systematic ministration to these simplest of the perceptions. But it must suffice to point out that any such ministration ought to be based upon the general truth that in the development of every faculty, markedly contrasted impressions are the first to be distinguished: that hence sounds greatly differing in loudness and pitch, colors very remote from each other, and substances widely unlike in hardness or texture, should be the first supplied; and that in each case the progression must be by slow degrees to impressions more nearly allied.

OBJECT-LESSONS.

7. It needs but a glance at the daily life of the infant to see that all the knowledge of things which is gained before the acquirement of speech, is self-gained—that the qualities of hardness and weight associated with certain visual appearances, the possession of particular forms and colors by particular persons, the production of special sounds by animals of special aspects, are phenomena which it observes for itself. In manhood too, when there are no longer teachers at hand, the observations and inferences required for daily guidance, must be made unhelped; and success in life depends upon the accuracy and completeness with which they are made. Is it probable then, that while the process displayed in the evolution of humanity at large, is repeated alike by the infant and the man, a reverse process must be followed during the period between infancy and manhood? and that too, even in so simple a thing as learning the properties of objects? Is it not obvious, on the contrary, that one method must be pursued throughout? And is not nature perpetually thrusting this method upon us, if we had but the wit to see it, and the humility to adopt it? What can be more manifest than the desire of children for intellectual sympathy? Mark how the infant sitting on your knee thrusts into your face the toy it holds, that you too may look at it. See when it makes a creak with its wet finger on the table, how it turns and looks at you; does it again, and again looks at you; thus saying as clearly as it can—"Hear this new sound." Watch how the elder children come into the room exclaiming—"Mamma, see what a curious thing," "Mamma, look at this," "Mamma, look at that;" and

would continue the habit, did not the silly mamma tell them not to tease her. Observe how, when out with the nurse-maid, each little one runs up to her with the new flower it has gathered, to show her how pretty it is, and to get her also, to say it is pretty. Listen to the eager volubility with which every urchin describes any novelty he has been to see, if only he can find some one who will attend with any interest. Does not the induction lie on the surface? Is it not clear that we must conform our course to these intellectual instincts—that we must just systematize the natural process—that we must listen to all the child has to tell us about each object, must induce it to say every thing it can think of about such object, must occasionally draw its attention to facts it has not yet observed, with the view of leading it to notice them itself whenever they recur, and must go on by-and-by to indicate or supply new series of things for a like exhaustive examination?

EXAMPLE OF A MASTER'S UNCONSCIOUS TUITION ON OBJECTS.

8. Step by step the mother familiarizes her little boy with the names of the simpler attributes, hardness, softness, color, taste, size, &c., in doing which she finds him eagerly help by bringing this to show her that it is red, and the other to make her feel that it is hard, as fast as she gives him words for these properties. Each additional property, as she draws his attention to it in some fresh thing which he brings her, she takes care to mention in connection with those he already knows; so that by the natural tendency to imitate, he may get into the habit of repeating them one after another. Gradually as there occur cases in which he omits to name one or more of the properties he has become acquainted with, she introduces the practice of asking him whether there is not something more that he can tell her about the thing he has got. Probably he does not understand. After letting him puzzle awhile she tells him; perhaps laughing at him a little for his failure. A few recurrences of this and he perceives what is to be done. When next she says she knows something more about the object than he has told her, his pride is roused; he looks at it intently; he thinks over all that he has heard; and the problem being easy, presently finds it out. He is full of glee at his success, and she sympathizes with him. In common with every child, he delights in the discovery of his powers. He wishes for more victories, and goes in quest of more things about which to tell her. As his faculties unfold she adds quality after quality to his list: progressing from hardness and softness to roughness and smoothness, from color to polish, from simple bodies to composite ones—thus constantly complicating the problem as he gains competence, constantly taxing his attention and memory to a greater extent, constantly maintaining his interest by supplying him with new impressions such as his mind can assimilate, and constantly gratifying him by conquests over such small difficulties as he can master. In doing this she is manifestly but following out that spontaneous process that was going on during a still earlier period—simply aiding self-evolution; and is aiding it in the mode suggested by the boy's instinctive behavior to her. Manifestly, too, the course she is pursuing is the one best calculated to establish a habit of exhaustive observation; which is the professed aim of these lessons. To *tell* a child this and to *show* it the other, is not to teach it how to observe, but to make it a mere recipient of another's observations: a proceeding which weakens rather than strengthens it powers of self-instruction—which deprives it of the pleasures resulting from successful activity—which presents this all-attractive knowledge

under the aspect of formal tuition—and which thus generates that indifference and even disgust with which these object-lessons are not unfrequently regarded. On the other hand, to pursue the course above described is simply to guide the intellect to its appropriate food; to join with the intellectual appetites their natural adjuncts—*amour propre* and the desire for sympathy; to induce by the union of all these an intensity of attention which insures perceptions alike vivid and complete; and to habituate the mind from the beginning to that practice of self-help which it must ultimately follow.

EXTENSION OF THE FIELD OF OBJECT-TEACHING.

9. Object-lessons should not only be carried on after quite a different fashion from that commonly pursued, but should be extended to a range of things far wider, and continue to a period far later, than now. They should not be limited to the contents of the house; but should include those of the fields and the hedges, the quarry and the sea-shore. They should not cease with early childhood; but should be so kept up during youth as insensibly to merge into the investigations of the naturalist and the man of science. Here again we have but to follow nature's leadings. Where can be seen an intenser delight than that of children picking up new flowers and watching new insects, or hoarding pebbles and shells? And who is there but perceives that by sympathizing with them they may be led on to any extent of inquiry into the qualities and structures of these things? Every botanist who has had children with him in the woods and the lanes must have noticed how eagerly they joined in his pursuits, how keenly they searched out plants for him, how intently they watched whilst he examined them, how they overwhelmed him with questions. The consistent follower of Bacon—the "servant and interpreter of nature," will see that we ought modestly to adopt the course of culture thus indicated. Having gained due familiarity with the simpler properties of inorganic objects, the child should by the same process be led on to a like exhaustive examination of the things it picks up in its daily walks—the less complex facts they present being alone noticed at first: in plants, the color, number, and forms of the petals and shapes of the stalks and leaves: in insects, the numbers of the wings, legs, and antennæ, and their colors. As these become fully appreciated and invariably observed, further facts may be successively introduced: in the one case, the numbers of stamens and pistils, the forms of the flowers, whether radial or bilateral in symmetry, the arrangement and character of the leaves, whether opposite or alternate, stalked or sessile, smooth or hairy, serrated, toothed, or crenate; in the other, the divisions of the body, the segments of the abdomen, the markings of the wings, the number of joints in the legs, and the forms of the smaller organs—the system pursued throughout being that of making it the child's ambition to say respecting every thing it finds, all that can be said. Then when a fit age has been reached, the means of preserving these plants which have become so interesting in virtue of the knowledge obtained of them, may as a great favor be supplied; and eventually, as a still greater favor, may also be supplied the apparatus needful for keeping the larvæ of our common butterflies and moths through their transformations—a practice which, as we can personally testify, yields the highest gratification; is continued with ardor for years; when joined with the formation of an entomological collection, adds immense interest to Saturday-afternoon rambles; and forms an admirable introduction to the study of physiology.

VALUE OF A LOVE AND A KNOWLEDGE OF NATURE.

10. If there is a more worthy aim for us than to be drudges—if there are other uses in the things around us than their power to bring money—if there are higher faculties to be exercised than acquisitive and sensual ones—if the pleasures which poetry and art and science and philosophy can bring are of any moment—then is it desirable that the instinctive inclination which every child shows to observe natural beauties and investigate natural phenomena should be encouraged. But this gross utilitarianism which is content to come into the world and quit it again without knowing what kind of a world it is or what it contains, may be met on its own ground. It will by and by be found that a knowledge of the laws of life is more important than any other knowledge whatever—that the laws of life include not only all bodily and mental processes, but by implication all the transactions of the house and the street, all commerce, all politics, all morals—and that therefore without a due acquaintance with them neither personal nor social conduct can be rightly regulated. It will eventually be seen too, that the laws of life are essentially the same throughout the whole organic creation; and further, that they can not be properly understood in their complex manifestations until they have been studied in their simpler ones. And when this is seen, it will be also seen that in aiding the child to acquire the out-of-door information for which it shows so great an avidity, and in encouraging the acquisition of such information throughout youth, we are simply inducing it to store up the raw material for future organization—the facts that will one day bring home to it with due force those great generalizations of science by which actions may be rightly guided.

DRAWING—INCLUDING FORM AND COLOR.

11. The spreading recognition of drawing as an element of education, is one amongst many signs of the more rational views on mental culture now beginning to prevail. Once more it may be remarked that teachers are at length adopting the course which nature has for ages been pressing upon their notice. The spontaneous efforts made by children to represent the men, houses, trees, and animals around them—on a slate if they can get nothing better, or with lead-pencil on paper, if they can beg them—are familiar to all. To be shown through a picture-book is one of their highest gratifications; and as usual, their strong imitative tendency presently generates in them the ambition to make pictures themselves also. This attempt to depict the striking things they see is a further instinctive exercise of the perceptions—a means whereby still greater accuracy and completeness of observation is induced. And alike by seeking to interest us in their discoveries of the sensible properties of things, and by their endeavors to draw, they solicit from us just that kind of culture which they most need.

Had teachers been guided by nature's hints not only in the making of drawing a part of education, but in the choice of their modes of teaching it, they would have done still better than they have done. What is it that the child first tries to represent? Things that are large, things that are attractive in color, things round which its pleasurable associations most cluster—human beings from whom it has received so many emotions, cows and dogs which interest by the many phenomena they present, houses that are hourly visible and strike by their size and contrast of parts. And which of all the processes of

representation gives it most delight? Coloring. Paper and pencil are good in default of something better; but a box of paints and a brush—these are the treasures. The drawing of outlines immediately becomes secondary to coloring—is gone through mainly with a view to the coloring; and if leave can be got to color a book of prints, how great is the favor! Now, ridiculous as such a position will seem to drawing-masters, who postpone coloring and who teach form by a dreary discipline of copying lines, we believe that the course of culture thus indicated is the right one. That priority of color to form, which, as already pointed out, has a psychological basis, and in virtue of which psychological basis arises this strong preference in the child, should be recognized from the very beginning; and from the very beginning also the things imitated should be real. That greater delight in color which is not only conspicuous in children but persists in most persons throughout life, should be continuously employed as the natural stimulus to the mastery of the comparatively difficult and unattractive form—should be the prospective reward for the achievement of form. And these instinctive attempts to represent interesting actualities should be all along encouraged; in the conviction that as, by a widening experience, smaller and more practicable objects become interesting, they too will be attempted; and that so a gradual approximation will be made towards imitations having some resemblance to the realities. No matter how grotesque the shapes produced: no matter how daubed and glaring the colors. The question is not whether the child is producing good drawings: the question is, whether it is developing its faculties. It has first to gain some command over its fingers, some crude notions of likeness; and this practice is better than any other for these ends; seeing that it is the spontaneous and the interesting one. During these early years, be it remembered, no formal drawing-lessons are possible: shall we therefore repress, or neglect to aid, these efforts at self-culture? or shall we encourage and guide them as normal exercises of the perceptions and the powers of manipulation? If by the supply of cheap wood-cuts to be colored, and simple contour-maps to have their boundary lines tinted, we can not only pleasurably draw out the faculty of color, but can incidentally produce some familiarity with the outlines of things and countries, and some ability to move the brush steadily; and if by the supply of temptingly-painted objects we can keep up the instinctive practice of making representations, however rough, it must happen that by the time drawing is commonly commenced there will exist a facility that would else have been absent. Time will have been gained; and trouble both to teacher and pupil, saved.

DIMENSIONS IN PERSPECTIVE.

12. If any dependence is to be placed upon the general principles of education that have been laid down, the process of learning to draw should be throughout continuous with those efforts of early childhood described above, as so worthy of encouragement. By the time that the voluntary practice thus initiated has given some steadiness of hand, and some tolerable ideas of proportion, there will have arisen a vague notion of body as presenting its three dimensions in perspective. And when, after sundry abortive, Chinese-like attempts to render this appearance on paper, there has grown up a pretty clear perception of the thing to be achieved, and a desire to achieve it, a first lesson in empirical perspective may be given by means of the apparatus occasionally used in explaining perspective as a science. This sounds formidable; but the

experiment is both comprehensive and interesting to any boy or girl of ordinary intelligence. · A plate of glass so framed as to stand vertically on the table, being placed before the pupil, and a book, or like simple object laid on the other side of it, he is requested, whilst keeping the eye in one position, to make ink dots upon the glass, so that they may coincide with, or hide the corners of this object. He is then told to join these dots by lines; on doing which he perceives that the lines he makes hide, or coincide with the outlines of the object. And then on being asked to put a sheet of paper on the other side of the glass, he discovers that the lines he has thus drawn represent the object as he saw it. They not only look like it, but he perceives that they must be like it, because he made them agree with its outlines; and by removing the paper he can repeatedly convince himself that they do agree with its outlines. The fact is new and striking; and serves him as an experimental demonstration, that lines of certain lengths, placed in certain directions on a plane, can represent lines of other lengths, and having other directions in space. Subsequently, by gradually changing the position of the object, he may be led to observe how some lines shorten and disappear, whilst others come into sight and lengthen. The convergence of parallel lines, and, indeed, all the leading facts of perspective may, from time to time, be similarly illustrated to him. If he has been duly accustomed to self-help, he will gladly, when it is suggested, make the attempt to draw one of these outlines upon paper, by the eye only; and it may soon be made an exciting aim to produce, unassisted, a representation, as like as he can, to one subsequently sketched on the glass. Thus, without the unintelligent, mechanical practice of copying other drawings, but by a method at once simple and attractive—rational, yet not abstract, a familiarity with the linear appearances of things, and a faculty of rendering them, may be, step by step, acquired. To which advantages add these:—that even thus early the pupil learns, almost unconsciously, the true theory of a picture—namely, that it is a delineation of objects as they appear when projected on a plane placed between them and the eye; and that when he reaches a fit age for commencing scientific perspective he is already thoroughly acquainted with the facts which form its logical basis.

GEOMETRY—PRIMARY.

13. As exhibiting a rational mode of communicating primary conceptions in geometry, we can not do better than quote the following passage from Mr. Wyse:—*

"A child has been in the habit of using cubes for arithmetic; let him use them also for the elements of geometry. I would begin with solids, the reverse of the usual plan. It saves all the difficulty of absurd definitions, and bad explanations on points, lines, and surfaces, which are nothing but abstractions. . . . A cube presents many of the principal elements of geometry; it at once exhibits points, straight lines, parallel lines, angles, parallelograms, &c., &c. These cubes are divisible into various parts. The pupil has already been familiarized with such divisions in numeration, and he now proceeds to a comparison of their several parts, and of the relation of these parts to each other. . . . From thence he advances to globes, which furnish him with elementary notions of the circle, of curves generally, &c., &c.

"Being tolerably familiar with solids, he may now substitute planes. The

* "*Education Reform.*" By Thomas Wyse.

transition may be made very easy. Let the cube, for instance, be cut into thin divisions, and placed on paper; he will then see as many plane rectangles as he has divisions; so with all the others. Globes may be treated in the same manner; he will thus see how surfaces really are generated, and be enabled to abstract them with facility in every solid.

"He has thus acquired the alphabet and reading of geometry. He now proceeds to write it.

"The simplest operation, and therefore the first, is merely to place these planes on a piece of paper, and pass the pencil round them. When this has been frequently done, the plane may be put at a little distance, and the child required to copy it, and so on."

A stock of geometrical conceptions having been obtained, in some such manner as this recommended by Mr. Wyse, a further step may, in course of time, be taken, by introducing the practice of testing the correctness of all figures drawn by the eye; thus alike exciting an ambition to make them exact, and continually illustrating the difficulty of fulfilling that ambition. In the cutting out of pieces for his card-houses, in the drawing of ornamental diagrams for coloring, and in those various instructive occupations which an inventive teacher will lead him into, he may be for a length of time advantageously left, like the primitive builder, to tentative processes; and will so gain an abundant experience of the difficulty of achieving his aims by the unaided senses. When, having meanwhile undergone a valuable discipline of the perceptions, he has reached a fit age for using a pair of compasses, he will, whilst duly appreciating these as enabling him to verify his ocular guesses, be still hindered by the difficulties of the approximative method. In this stage he may be left for a further period: partly as being yet too young for any thing higher; partly because it is desirable that he should be made to feel still more strongly the want of systematic contrivances. If the acquisition of knowledge is to be made continuously interesting; and if, in the early civilization of the child, as in the early civilization of the race, science becomes attractive only as ministering to art; it is manifest that the proper preliminary to geometry is a long practice in those constructive processes which geometry will facilitate. Observe that here, too, nature points the way. Almost invariably, children, show a strong propensity to cut out things in paper, to make, to build—a propensity which, if duly encouraged and directed, will not only prepare the way for scientific conceptions, but will develop those powers of manipulation in which most people are so deficient.

GEOMETRY—EMPIRICAL.

14. When the observing and inventive faculties have attained the requisite power, the pupil may be introduced to empirical geometry; that is—geometry dealing with methodical solutions, but not with the demonstrations of them. Like all other transitions in education, this should be made not formally but incidentally; and the relationship to constructive art should still be maintained. To make a tetrahedron in cardboard, like one given to him, is a problem which will alike interest the pupil, and serve as a convenient starting-point. In attempting this, he finds it needful to draw four equilateral triangles arranged in special positions. Being unable in the absence of an exact method to do this accurately he discovers on putting the triangles into their respective positions, that he can not make their sides fit, and that their angles do not properly meet

at the apex. He may now be shown how by describing a couple of circles, each of these triangles may be drawn with perfect correctness and without guessing; and after his failure he will duly value the information. Having thus helped him to the solution of his first problem, with the view of illustrating the nature of geometrical methods, he is in future to be left altogether to his own ingenuity in solving the questions put to him. To bisect a line, to erect a perpendicular, to describe a square, to bisect an angle, to draw a line parallel to a given line, to describe a hexagon, are problems which a little patience will enable him to find out. And from these he may be led on step by step to questions of a more complex kind; all of which, under judicious management, he will puzzle through unhelped. Doubtless, many of those brought up under the old regime, will look upon this assertion skeptically. We speak from facts, however, and those neither few nor special. We have seen a class of boys become so interested in making out solutions to these problems, as to look forward to their geometry-lesson as a chief event of the week. Within the last month, we have been told of one girls' school, in which some of the young ladies voluntarily occupy themselves with geometrical questions out of school-hours; and of another, in which they not only do this, but in which one of them is begging for problems to find out during the holidays—both which facts we state on the authority of the teacher. There could indeed be no stronger proofs than are thus afforded of the practicability and the immense advantage of self-development. A branch of knowledge which as commonly taught is dry and even repulsive, may, by following the method of nature, be made extremely interesting and profoundly beneficial. We say profoundly beneficial, because the effects are not confined to the gaining of geometrical facts, but often revolutionize the whole state of mind. It has repeatedly occurred, that those who have been stupefied by the ordinary school-drill—by its abstract formulas, by its wearisome tasks, by its cramming—have suddenly had their intellects roused, by thus ceasing to make them passive recipients, and inducing them to become active discoverers.

This empirical geometry which presents an endless series of problems, and should be continued along with other studies for years, may throughout be advantageously accompanied by those concrete applications of its principles which serve as its preliminary. After the cube, the octahedron, and the various forms of pyramid and prism have been mastered, may come the more complex regular bodies—the dodecahedron, and the icosahedron—to construct which out of single pieces of cardboard requires considerable ingenuity. From these, the transition may naturally be made to such modified forms of the regular bodies as are met with in crystals—the truncated cube, the cube with its dihedral as well as its solid angles truncated, the octahedron and the various prisms as similarly modified; in imitating which numerous forms assumed by different metals and salts, an acquaintance with the leading facts of mineralogy will be incidentally gained. After long continuance in exercises of this kind, rational geometry, as may be supposed, presents no obstacles. Constantly habituated to contemplate relationships of form and quantity, and vaguely perceiving from time to time the necessity of certain results as reached by certain means, the pupil comes to regard the demonstrations of Euclid as the missing supplements to his familiar problems. His well-disciplined faculties enable him easily to master its successive propositions, and to appreciate their value; and he has the occasional gratification of finding some of his own methods proved to be true.

Thus he enjoys what is to the unprepared a dreary task. It only remains to add, that his mind will presently arrive at a fit condition for that most valuable of all exercises for the reflective faculties—the making of original demonstrations.

THE ACQUISITION OF KNOWLEDGE SHOULD BE A PROCESS OF SELF-INSTRUCTION AND CONTINUOUS PLEASURE.

15. If progression from simple to complex, and from concrete to abstract, be considered the essential requirements as dictated by abstract psychology, then do these requirements that knowledge shall be self-mastered, and pleasurably mastered, become the tests by which we may judge whether the dictates of abstract psychology are being fulfilled. If the first embody the leading generalizations of the *science* of mental growth, the last are the chief canons of the *art* of fostering mental growth. For manifestly if the steps in our *curriculum* are so arranged that they can be successively ascended by the pupil himself with little or no help, they must correspond with the stages of evolution, in his faculties; and manifestly if the successive achievements of these steps are intrinsically gratifying to him, it follows that they require no more than a normal exercise of his powers.

But the making education a process of self-evolution has other advantages than this of keeping our lessons in the right order. In the first place, it guarantees a vividness and permanency of impression which the usual methods can never produce. Any piece of knowledge which the pupil has himself acquired, any problem which he has himself solved, becomes by virtue of the conquest much more thoroughly his than it could else be. The preliminary activity of mind which his success implies, the concentration of thought necessary to it, and the excitement consequent on his triumph, conspire to register all the facts in his memory in a way that no mere information heard from a teacher, or read in a school-book, can be registered. Even if he fails, the tension to which his faculties have been wound up insures his remembrance of the solution when given to him, better than half a dozen repetitions would. Observe again, that this discipline necessitates a continuous organization of the knowledge he acquires. It is in the very nature of facts and inferences, assimilated in this normal manner, that they successively become the premises of further conclusions. The solution of yesterday's problem helps the pupil in mastering to-day's. Thus the knowledge is turned into faculty as soon as it is taken in, and forthwith aids in the general function of thinking—does not lie merely written in the pages of an internal library, as when rote-learnt. Mark further, the importance of the moral culture which this constant self-help involves. Courage in attacking difficulties, patient concentration of the attention, perseverance through failures—these are characteristics which after-life specially requires; and these are characteristics which this system of making the mind work for its food specially produces. That it is thoroughly practicable to carry out instruction after this fashion we can ourselves testify; having been in youth thus led to successively solve the comparatively complex problems of Perspective. And that leading teachers have been gradually tending in this direction is indicated alike in the saying of Fellenberg, that "the individual, independent activity of the pupil is of much greater importance than the ordinary busy officiousness of many who assume the office of educators;" in the opinion of Horace Mann, that "unfortunately education amongst us at present consists too much in *telling*, not

in *training;*" and in the remark of M. Marcel, that "what the learner discovers by mental exertion is better known than what is told to him."

A pleasurable state of feeling is far more favorable to intellectual action than one of indifference or disgust. Every one knows that things read, heard, or seen with interest, are better remembered than those read, heard, or seen with apathy. In the one case the faculties appealed to are actively occupied with the subject presented; in the other they are inactively occupied with it; and the attention is continually drawn away after more attractive thoughts. Hence the impressions are respectively strong and weak.

No one can compare the faces and manners of two boys—the one made happy by mastering interesting subjects, and the other made miserable by disgust with his studies, by consequent failure, by cold looks, by threats, by punishment—without seeing that the disposition of the one is being benefited, and that of the other greatly injured. Whoever has marked the effect of intellectual success upon the mind, and the power of the mind over the body, will see that in the one case both temper and health are favorably affected; whilst in the other there is danger of permanent moroseness, of permanent timidity, and even of permanent constitutional depression. To all which considerations we must add the further one, that the relationship between teachers and their pupils is, other things equal, rendered friendly and influential, or antagonistic and powerless, according as the system of culture produces happiness or misery. Human beings are at the mercy of their associated ideas. A daily minister of pain can not fail to be regarded with a secret dislike, and if he causes no emotions but painful ones, will inevitably be hated. Conversely, he who constantly aids children to their ends, hourly provides them with the satisfactions of conquest, hourly encourages them through their difficulties and sympathizes in their successes, can not fail to be liked; nay, if his behavior is consistent throughout, must be loved. And when we remember how efficient and benign is the control of a master who is felt to be a friend, when compared with the control of one who is looked upon with aversion, or at best indifference, we may infer that the indirect advantages of conducting education on the happiness principle do not fall far short of the direct ones. To all who question the possibility of acting out the system here advocated, we reply as before, that not only does theory point to it, but experience commends it. To the many verdicts of distinguished teachers who since Pestalozzi's time have testified this, may be here added that of Professor Pillans, who asserts that "where young people are taught as they ought to be, they are quite as happy in school as at play, seldom less delighted, nay, often more, with the well-directed exercise of their mental energies, than with that of their muscular powers."

As suggesting a final reason for making education a process of self-instruction, and by consequence a process of pleasurable instruction, we may advert to the fact that, in proportion as it is made so, is there a probability that education will not cease when school-days end. As long as the acquisition of knowledge is rendered habitually repugnant, so long will there be a prevailing tendency to discontinue it when free from the coercion of parents and masters. And when the acquisition of knowledge has been rendered habitually gratifying, then will there be as prevailing a tendency to continue, without superintendence, that same self-culture previously carried on under superintendence. These results are inevitable. While the laws of mental association remain true—while men dislike the things and places that suggest painful recollections, and delight in

those which call to mind by-gone pleasures—painful lessons will make knowledge repulsive, and pleasurable lessons will make it attractive. The men to whom in boyhood information came in dreary tasks along with threats of punishment, and who were never led into habits of independent inquiry, are unlikely to be students in after years; while those to whom it came in the natural forms, at the proper times, and who remember its facts as not only interesting in themselves, but as the occasions of a long series of gratifying successes, are likely to continue through life that self-instruction commenced in youth.

IV. WHAT KNOWLEDGE IS MOST WORTH.

THE RELATIVE VALUES OF KNOWLEDGE.

1. Before there can be a rational *curriculum*, we must settle which things it most concerns us to know; or, to use a word of Bacon's, now unfortunately obsolete—we must determine the relative values of knowledges.

Had we time to master all subjects we need not be particular. To quote the old song:—

> Could a man be secure
> That his days would endure
> As of old, for a thousand long years,
> What things might he know!
> What deeds might he do!
> And all without hurry or care.

"But we that have but span-long lives" must ever bear in mind our limited time for acquisition. And remembering how narrowly this time is limited, not only by the shortness of life, but also still more by the business of life, we ought to be especially solicitous to employ what time we have to the greatest advantage. Before devoting years to some subject which fashion or fancy suggests, it is surely wise to weigh with great care the worth of the results, as compared with the worth of various alternative results which the same years might bring if otherwise applied.

How to live?—that is the essential question for us. Not how to live in the mere material sense only, but in the widest sense. The general problem which comprehends every special problem is—the right ruling of conduct in all directions under all circumstances. In what way to treat the body; in what way to treat the mind; in what way to manage our affairs; in what way to bring up a family; in what way to behave as a citizen; in what way to utilize all those sources of happiness which nature supplies—how to use all our faculties to the greatest advantage of ourselves and others—how to live completely? And this being the great thing needful for us to learn, is, by consequence, the great thing which education has to teach. To prepare us for complete living is the function which education has to discharge; and the only rational mode of judging of any educational course is, to judge in what degree it discharges such function.

Our first step must obviously be to classify, in the order of their importance, the leading kinds of activity which constitute human life. They may be naturally arranged into:—1. Those activities which directly minister to self-preservation; 2. Those activities which, by securing the necessaries of life, indirectly minister to self-preservation; 3. Those activities which have for their

end the rearing and discipline of offspring; 4. Those activities which are involved in the maintenance of proper social and political relations; 5. Those miscellaneous activities which make up the leisure part of life, devoted to the gratification of the tastes and feelings.

KNOWLEDGE REQUISITE TO SELF-PRESERVATION.

2. Happily, that all-important part of education which goes to secure direct self-preservation, is in great part already provided for. Too momentous to be left to our blundering, Nature takes it into her own hands. While yet in its nurse's arms, the infant, by hiding its face and crying at the sight of a stranger, shows the dawning instinct to attain safety by flying from that which is unknown and may be dangerous; and when it can walk, the terror it manifests if an unfamiliar dog comes near, or the screams with which it runs to its mother after any startling sight or sound, shows this instinct further developed. Moreover, knowledge subserving direct self-preservation is that which it is chiefly busied in acquiring from hour to hour. How to balance its body; how to control its movements so as to avoid collisions; what objects are hard, and will hurt if struck; what objects are heavy, and injure if they fall on the limbs; which things will bear the weight of the body, and which not; the pains inflicted by fire, by missiles, by sharp instruments—these, and various other pieces of information needful for the avoidance of death or accident, it is ever learning. And when, a few years later, the energies go out in running, climbing, and jumping, in games of strength and games of skill, we see in all these actions by which the muscles are developed, the perceptions sharpened, and the judgment quickened, a preparation for the safe conduct of the body among surrounding objects and movements; and for meeting those greater dangers that occasionally occur in the lives of all. Being thus, as we say, so well cared for by Nature, this fundamental education needs comparatively little care from us. What we are chiefly called upon to see, is, that there shall be free scope for gaining this experience, and receiving this discipline,—that there shall be no such thwarting of Nature as that by which stupid schoolmistresses commonly prevent the girls in their charge from the spontaneous physical activities they would indulge in; and so render them comparatively incapable of taking care of themselves in circumstances of peril.

KNOWLEDGE REQUISITE TO INDUSTRIAL SUCCESS.

3. While every one is ready to indorse the abstract proposition that instruction fitting youths for the business of life is of high importance, or even to consider it of supreme importance; yet scarcely any inquire what instruction will so fit them. It is true that reading, writing, and arithmetic are taught with an intelligent appreciation of their uses; but when we have said this we have said nearly all. While the great bulk of what else is acquired has no bearing on the industrial activities, an immensity of information that has a direct bearing on the industrial activities is entirely passed over.

For, leaving out only some very small classes, what are all men employed in? They are employed in the production, preparation, and distribution of commodities. And on what does efficiency in the production, preparation, and distribution of commodities depend? It depends on the use of methods fitted to the respective natures of these commodities; it depends on an adequate knowledge of their physical, chemical, or vital properties, as the case may be: that is,

it depends on Science. This order of knowledge, which is in great part ignored in our school courses, is the order of knowledge underlying the right performance of all those processes by which civilized life is made possible.

Mathematics.

For all the higher arts of construction, some acquaintance with Mathematics is indispensable. The village carpenter, who, lacking rational instruction, lays out his work by empirical rules learnt in his apprenticeship, equally with the builder of a Britannia Bridge, makes hourly reference to the laws of quantitative relations. The surveyor on whose survey the land is purchased; the architect in designing a mansion to be built on it; the builder in preparing his estimates; his foreman in laying out the foundations; the masons in cutting the stones; and the various artisans who put up the fittings; are all guided by geometrical truths. Railway-making is regulated from beginning to end by mathematics: alike in the preparation of plans and sections; in staking out the line; in the mensuration of cuttings and embankments; in the designing, estimating, and building of bridges, culverts, viaducts, tunnels, stations. And similarly with the harbors, docks, piers, and various engineering and architectural works that fringe the coasts and overspread the face of the country; as well as the mines that run underneath it. Out of geometry, too, as applied to astronomy, the art of navigation has grown; and so, by this science, has been made possible that enormous foreign commerce which supports a large part of our population, and supplies us with many necessaries and most of our luxuries. And now-a-days even the farmer, for the correct laying out of his drains, has recourse to the level—that is, to geometrical principles. When from those divisions of mathematics which deal with *space*, and *number*, some small smattering of which is given in schools, we turn to that other division which deals with *force*, of which even a smattering is scarcely ever given, we meet with another large class of activities which this science presides over. On the application of rational mechanics depends the success of nearly all modern manufacture. The properties of the lever, the wheel and axle, &c., are involved in every machine—every machine is a solidified mechanical theorem; and to machinery in these times we owe nearly all production. Trace the history of the breakfast-roll. The soil out of which it came was drained with machine-made tiles; the surface was turned over by a machine; the seed was put in by a machine; the wheat was reaped, thrashed, and winnowed by machines; by machinery it was ground and bolted; and had the flour been sent to Gosport, it might have been made into biscuits by a machine. Look round the room in which you sit. If modern, probably the bricks in its walls were machine-made; by machinery the flooring was sawn and planed, the mantel-shelf sawn and polished, the paper-hangings made and printed; the veneer on the table, the turned legs of the chairs, the carpet, the curtains, are all products of machinery. And your clothing—plain, figured, or printed—is it not wholly woven, nay, perhaps even sewed, by machinery? And the volume you are reading—are not its leaves fabricated by one machine and covered with these words by another? Add to which that for the means of distribution over both land and sea, we are similarly indebted. And then let it be remembered that according as the principles of mechanics are well or ill used to these ends, comes success or failure—individual and national. The engineer who misapplies his formulæ for the strength of materials, builds a bridge that breaks down. The manufacturer whose apparatus

is badly devised, can not compete with another whose apparatus wastes less in friction and inertia. The ship-builder adhering to the old model, is outsailed by one who builds on the mechanically-justified wave-line principle. And as the ability of a nation to hold its own against other nations depends on the skilled activity of its units, we see that on such knowledge may turn the national fate. Judge then the worth of mathematics.

Physics.

Pass next to Physics. Joined with mathematics, it has given us the steam-engine, which does the work of millions of laborers. That section of physics which deals with the laws of heat, has taught us how to economize fuel in our various industries; how to increase the produce of our smelting furnaces by substituting the hot for the cold blast; how to ventilate our mines; how to prevent explosions by using the safety-lamp; and, through the thermometer, how to regulate innumerable processes. That division which has the phenomena of light for its subject, gives eyes to the old and the myopic; aids through the microscope in detecting diseases and adulterations; and by improved lighthouses prevents shipwrecks. Researches in electricity and magnetism have saved incalculable life and property by the compass; have subserved sundry arts by the electrotype; and now, in the telegraph, have supplied us with the agency by which for the future all mercantile transactions will be regulated, political intercourse carried on, and perhaps national quarrels often avoided. While in the details of in-door life, from the improved kitchen-range up to the stereoscope on the drawing-room table, the applications of advanced physics underlie our comforts and gratifications.

Chemistry.

Still more numerous are the bearings of Chemistry on those activities by which men obtain the means of living. The bleacher, the dyer, the calico-printer, are severally occupied in processes that are well or ill done according as they do or do not conform to chemical laws. The economical reduction from their ores of copper, tin, zinc, lead, silver, iron, are in a great measure questions of chemistry. Sugar-refining, gas-making, soap-boiling, gunpowder manufacture, are operations all partly chemical; as are also those by which are produced glass and porcelain. Whether the distiller's wort stops at the alcoholic fermentation or passes into the acetous, is a chemical question on which hangs his profit or loss; and the brewer, if his business is sufficiently large, finds it pay to keep a chemist on his premises. Glance through a work on technolgy, and it becomes at once apparent that there is now scarcely any process in the arts or manufactures over some part of which chemistry does not preside. And then, lastly, we come to the fact that in these times, agriculture, to be profitably carried on, must have like guidance. The analysis of manures and soils; their adaptations to each other; the use of gypsum or other substance for fixing ammonia; the utilization of coprolites; the production of artificial manures—all these are boons of chemistry which it behooves the farmer to acquaint himself with. Be it in the lucifer match, or in disinfected sewage, or in photograhps—in bread made without fermentation, or perfumes extracted from refuse, we may perceive that chemistry affects all our industries; and that, by consequence, knowledge of it concerns every one who is directly or indirectly connected with our industries.

Biology.

And then the science of life—Biology: does not this, too, bear fundamentally upon these processes of indirect self-preservation? With what we ordinarily call manufactures, it has, indeed, little connection; but with the all-essential manufacture—that of food—it is inseparably connected. As agriculture must conform its methods to the phenomena of vegetable and animal life, it follows necessarily that the science of these phenomena is the rational basis of agriculture. Various biological truths have indeed been empirically established and acted upon by farmers while yet there has been no conception of them as science: such as that particular manures are suited to particular plants; that crops of certain kinds unfit the soil for other crops; that horses can not do good work on poor food; that such and such diseases of cattle and sheep are caused by such and such conditions. These, and the everyday knowledge which the agriculturist gains by experience respecting the right management of plants and animals, constitute his stock of biological facts; on the largeness of which greatly depends his success. And as these biological facts, scanty, indefinite, rudimentary, though they are, aid him so essentially; judge what must be the value to him of such facts when they become positive, definite, and exhaustive. Indeed, even now we may see the benefits that rational biology is conferring on him. The truth that the production of animal heat implies waste of substance, and that, therefore, preventing loss of heat prevents the need for extra food—a purely theoretical conclusion—now guides the fattening of cattle: it is found that by keeping cattle warm, fodder is saved. Similarly with respect to variety of food. The experiments of physiologists have shown that not only is change of diet beneficial, but that digestion is facilitated by a mixture of ingredients in each meal: both which truths are now influencing cattle-feeding. The discovery that a disorder known as "the staggers," of which many thousands of sheep have died annually, is caused by an entozoon which presses on the brain; and that if the creature is extracted through the softened place in the skull which marks its position, the sheep usually recovers; is another debt which agriculture owes to biology. When we observe the marked contrast between our farming and farming on the Continent, and remember that this contrast is mainly due to the far greater influence science has had upon farming here than there; and when we see how, daily, competition is making the adoption of scientific methods more general and necessary; we shall rightly infer that very soon, agricultural success in England will be impossible without a competent knowledge of animal and vegetable physiology.

Science of Society.

Yet one more science have we to note as bearing directly on industrial success—the Science of Society. Without knowing it, men who daily look at the state of the money-market, glance over prices current, discuss the probable crops of corn, cotton, sugar, wool, silk, weigh the chances of war, and from all those data decide on their mercantile operations, are students of social science: empirical and blundering students it may be; but still, students who gain the prizes or are plucked of their profits, according as they do or do not reach the right conclusion. Not only the manufacturer and the merchant must guide their transactions by calculations of supply and demand, based on numerous facts, and tacitly recognizing sundry general principles of social action; but

even the retailer must do the like: his prosperity very greatly depending upon the correctness of his judgments respecting the future wholesale prices and the future rates of consumption. Manifestly, all who take part in the entangled commercial activities of a community, are vitally interested in understanding the laws according to which those activities vary.

Thus, to all such as are occupied in the production, exchange, or distribution of commodities, acquaintance with science in some of its departments, is of fundamental importance.

KNOWLEDGE REQUISITE TO THE REARING AND DISCIPLINE OF THE FAMILY OFFSPRING.

4. Is it not an astonishing fact, that though on the treatment of offspring depend their lives or deaths, and their moral welfare or ruin; yet not one word of instruction on the treatment of offspring is ever given to those who will hereafter be parents? Is it not monstrous that the fate of a new generation should be left to the chances of unreasoning custom, impulse, fancy—joined with the suggestions of ignorant nurses and the prejudiced counsel of grandmothers? If a merchant commenced business without any knowledge of arithmetic and book-keeping, we should exclaim at his folly, and look for disastrous consequences. Or if, before studying anatomy, a man set up as a surgical operator, we should wonder at his audacity and pity his patients. But that parents should begin the difficult task of rearing children without ever having given a thought to the principles—physical, moral, or intellectual—which ought to guide them, excites neither surprise at the actors nor pity for their victims.

To tens of thousands that are killed, add hundreds of thousands that survive with feeble constitutions, and millions that grow up with constitutions not so strong as they should be; and you will have some idea of the curse inflicted on their offspring by parents ignorant of the laws of life. Do but consider for a moment that the regimen to which children are subject is hourly telling upon them to their life-long injury or benefit; and that there are twenty ways of going wrong to one way of going right; and you will get some idea of the enormous mischief that is almost everywhere inflicted by the thoughtless, haphazard system in common use. Is it decided that a boy shall be clothed in some flimsy short dress, and be allowed to go playing about with limbs reddened by cold? The decision will tell on his whole future existence—either in illnesses; or in stunted growth; or in deficient energy; or in a maturity less vigorous than it ought to have been, and consequent hindrances to success and happiness. Are children doomed to a monotonous dietary, or a dietary that is deficient in nutritiveness? Their ultimate physical power and their efficiency as men and women, will inevitably be more or less diminished by it. Are they forbidden vociferous play, or (being too ill-clothed to bear exposure,) are they kept in-doors in cold weather? They are certain to fall below that measure of health and strength to which they would else have attained. When sons and daughters grow up sickly and feeble, parents commonly regard the event as a misfortune—as a visitation of Providence. Thinking after the prevalent chaotic fashion, they assume that these evils come without causes; or that the causes are supernatural. Nothing of the kind. In some cases the causes are doubtless inherited; but in most cases foolish regulations are the causes. Very generally parents themselves are responsible for all this pain, this debility, this depression, this misery. They have undertaken to control the lives of their off-

spring from hour to hour; with cruel carelessness they have neglected to learn anything about these vital processes which they are unceasingly affecting by their commands and prohibitions; in utter ignorance of the simplest physiologic laws, they have been year by year undermining the constitutions of their children; and have so inflicted disease and premature death, not only on them but on their descendants.

Equally great are the ignorance and the consequent injury, when we turn from physical training to moral training. Consider the young mother and her nursery legislation. But a few years ago she was at school, where her memory was crammed with words, and names, and dates, and her reflective faculties scarcely in the slightest degree exercised—where not one idea was given her respecting the methods of dealing with the opening mind of childhood; and where her discipline did not in the least fit her for thinking out methods of her own. The intervening years have been passed in practicing music, in fancy-work, in novel-reading, and in party-going: no thought having yet been given to the grave responsibilities of maternity; and scarcely any of that solid intellectual culture obtained which would be some preparation for such responsibilities. And now see her with an unfolding human character committed to her charge—see her profoundly ignorant of the phenomena with which she has to deal, undertaking to do that which can be done but imperfectly even with the aid of the profoundest knowledge. She knows nothing about the nature of the emotions, their order of evolution, their functions, or where use ends and abuse begins. She is under the impression that some of the feelings are wholly bad, which is not true of any one of them; and that others are good, however far they may be carried, which is also not true of any one of them. And then, ignorant as she is of that with which she has to deal, she is equally ignorant of the effects that will be produced on it by this or that treatment. What can be more inevitable than the disastrous results we see hourly arising? Lacking knowledge of mental phenomena, with their causes and consequences, her interference is frequently more mischievous than absolute passivity would have been. This and that kind of action, which are quite normal and beneficial, she perpetually thwarts; and so diminishes the child's happiness and profit, injures its temper and her own, and produces estrangement. Deeds which she thinks it desirable to encourage, she gets performed by threats and bribes, or by exciting a desire for applause: considering little what the inward motive may be, so long as the outward conduct conforms; and thus cultivating hypocrisy, and fear, and selfishness, in place of good feeling. While insisting on truthfulness, she constantly sets an example of untruth, by threatening penalties which she does not inflict. While inculcating self-control, she hourly visits on her little ones angry scoldings for acts that do not call for them. She has not the remotest idea that in the nursery, as in the world, that alone is the truly salutary discipline which visits on all conduct, good and bad, the natural consequences, pleasurable or painful, which in the nature of things such conduct tends to bring. Being thus without theoretic guidance, and quite incapable of guiding herself by tracing the mental processes going on her children, her rule is impulsive, inconsistent, mischievous, often, in the highest degree; and would indeed be generally ruinous, were it not that the overwhelming tendency of the growing mind to assume the moral type of the race, usually subordinates all minor influences.

And then the culture of the intellect—is not this, too, mismanaged in a

similar manner? Grant that the phenomena of intelligence conform to laws; grant that the evolution of intelligence in a child also conforms to laws; and it follows inevitably that education can be rightly guided only by a knowledge of these laws. To suppose that you can properly regulate this process of forming and accumulating ideas, without understanding the nature of the process, is absurd. How widely, then, must teaching as it is, differ from teaching as it should be; when hardly any parents, and but few teachers, know anything about psychology. As might be expected, the system is grievously at fault, alike in matter and in manner. While the right class of facts is withheld, the wrong class is forcibly administered in the wrong way and in the wrong order. With that common limited idea of education which confines it to knowledge gained from books, parents thrust primers into the hands of their little ones years too soon, to their great injury. Not recognizing the truth that the function of books is supplementary—that they form an indirect means to knowledge when direct means fail—a means of seeing through other men what you can not see for yourself; they are eager to give second-hand facts in place of first-hand facts. Not perceiving the enormous value of that spontaneous education which goes on in early years—not perceiving that a child's restless observation, instead of being ignored or checked, should be diligently administered to, and made as accurate and complete as possible; they insist on occupying its eyes and thoughts with things that are, for the time being, incomprehensible and repugnant. Possessed by a superstition which worships the symbols of knowledge instead of the knowledge itself, they do not see that only when his acquaintance with the objects and processes of the household, the streets, and the fields, is becoming tolerably exhaustive—only then should a child be introduced to the new sources of information which books supply: and this, not only because immediate cognition is of far greater value than mediate cognition; but also, because the words contained in books can be rightly interpreted into ideas, only in proportion to the antecedent experience of things. Observe next, that this formal instruction, far too soon commenced, is carried on with but little reference to the laws of mental development. Intellectual progress is of necessity from the concrete to the abstract. But regardless of this, highly abstract subjects, such as grammar, which should come quite late, are begun quite early. Political geography, dead and uninteresting to a child, and which should be an appendage of sociological studies, is commenced betimes; while physical geography, comprehensible and comparatively attractive to a child, is in great part passed over. Nearly every subject dealt with is arranged in abnormal order: definitions, and rules, and principles being put first, instead of being disclosed, as they are in the order of nature, through the study of cases. And then, pervading the whole, is the vicious system of rote learning—a system of sacrificing the spirit to the letter. See the results. What with perceptions unnaturally dulled by early thwarting, and a coerced attention to books—what with the mental confusion produced by teaching subjects before they can be understood, and in each of them giving generalizations before the facts of which these are the generalizations—what with making the pupil a mere passive recipient of other's ideas, and not in the least leading him to be an active inquirer or self-instructor—and what with taxing the faculties to excess; there are very few minds that become as efficient as they might be. Examinations being once passed, books are laid aside; the greater part of what has been acquired, being unorganized, soon drops out of

recollection; what remains is mostly inert—the art of applying knowledge not having been cultivated; and there is but little power either of accurate observation or independent thinking. To all which add, that while much of the information gained is of relatively small value, an immense mass of information of transcendent value is entirely passed over.

Thus we find the facts to be such as might have been inferred *à priori*. The training of children—physical, moral, and intellectual—is dreadfully defective. And in great measure it is so, because parents are devoid of that knowledge by which this training can alone be rightly guided. What is to be expected when one of the most intricate of problems is undertaken by those who have given scarcely a thought to the principles on which its solution depends? For shoemaking or house-building, for the management of a ship or a locomotive-engine, a long apprenticeship is needful. Is it, then, that the unfolding of a human being in body and mind, is so comparatively simple a process, that any one may superintend and regulate it with no preparation whatever? If not—if the process is with one exception more complex than any in Nature, and the task of administering to it one of surpassing difficulty; is it not madness to make no provision for such a task? Better sacrifice accomplishments than omit this all-essential instruction. When a father, acting on false dogmas adopted without examination, has alienated his sons, driven them into rebellion by his harsh treatment, ruined them, and made himself miserable; he might reflect that the study of Ethology would have been worth pursuing, even at the cost of knowing nothing about Æschylus. When a mother is mourning over a first-born that has sunk under the sequelæ of scarlet-fever—when perhaps a candid medical man has confirmed her suspicion that her child would have recovered had not its system been enfeebled by over-study—when she is prostrate under the pangs of combined grief and remorse; it is but a small consolation that she can read Dante in the original.

Thus we see that for regulating the third great division of human activities, a knowledge of the laws of life is the one thing needful. Some acquaintance with the first principles of physiology and the elementary truths of psychology is indispensable for the right bringing up of children. We doubt not that this assertion will by many be read with a smile. That parents in general should be expected to acquire a knowledge of subjects so abstruse, will seem to them an absurdity. And if we proposed that an exhaustive knowledge of these subjects should be obtained by all fathers and mothers, the absurdity would indeed be glaring enough. But we do not. General principles only, accompanied by such detailed illustrations as may be needed to make them understood, would suffice. And these might be readily taught—if not rationally, then dogmatically. Be this as it may, however, here are the indisputable facts:—that the development of children in mind and body rigorously obeys certain laws; that unless these laws are in some degree conformed to by parents, death is inevitable; that unless they are in a great degree conformed to, there must result serious physical and mental defects; and that only when they are completely conformed to, can a perfect maturity be reached. Judge, then, whether all who may one day be parents, should not strive with some anxiety to learn what these laws are.

KNOWLEDGE REQUISITE FOR THE FUNCTIONS OF THE CITIZEN.

5. That which it really concerns us to know [to discharge well the functions

of the citizen,] is the natural history of society. We want all facts which help us to understand how a nation has grown and organized itself. Among these, let us of course have an account of its government; with as little as may be of gossip about the men who officered it, and as much as possible about the structure, principles, methods, prejudices, corruptions, &c., which it exhibited: and let this account not only include the nature and actions of the central government, but also those of local governments, down to their minutest ramifications. Let us of course also have a parallel description of the ecclesiastical government—its organization, its conduct, its power, its relations to the state: and accompanying this, the ceremonial, creed, and religious ideas—not only those nominally believed, but those really believed and acted upon. Let us at the same time be informed of the control exercised by class over class, as displayed in all social observances—in titles, salutations, and forms of address. Let us know, too, what were all the other customs which regulated the popular life out of doors and in-doors: including those which concern the relations of the sexes, and the relations of parents to children. The superstitions, also, from the more important myths down to the charms in common use, should be indicated. Next should come a delineation of the industrial system: showing to what extent the division of labor was carried; how trades were regulated, whether by caste, guilds, or otherwise; what was the connection between employers and employed; what were the agencies for distributing commodities, what were the means of communication; what was the circulating medium. Accompanying all which should come an account of the industrial arts technically considered: stating the processes in use, and the quality of the products. Further, the intellectual condition of the nation in its various grades should be depicted: not only with respect to the kind and amount of education, but with respect to the progress made in science, and the prevailing manner of thinking. The degree of æsthetic culture, as displayed in architecture, sculpture, painting, dress, music, poetry, and fiction, should be described. Nor should there be omitted a sketch of the daily lives of the people—their food, their homes, and their amusements. And lastly, to connect the whole, should be exhibted the morals, theoretical and practical, of all classes; as indicated in their laws, habits, proverbs, deeds. All these facts, given with as much brevity as consists with clearness and accuracy, should be so grouped and arranged that they may be comprehended in their *ensemble;* and thus may be contemplated as mutually dependent parts of one great whole. The aim should be so to present them that we may readily trace the *consensus* subsisting among them; with the view of learning what social phenomena co-exist with what others. And then the corresponding delineations of succeeding ages should be so managed as to show us, as clearly as may be, how each belief, institution, custom, and arrangement was modified; and how the *consensus* of preceding structures and functions was developed into the *consensus* of succeeding ones. Such alone is the kind of information respecting past times, which can be of service to the citizen for the regulation of his conduct.

ÆSTHETICS, OR EDUCATION FOR RELAXATIONS, AMUSEMENTS, ETC.

6. After considering what training best fits for self-preservation, for the obtainment of sustenance, for the discharge of parental duties, and for the regula-

tion of social and political conduct; we have now to consider what training best fits for the miscellaneous ends not included in these—for the enjoyments of Nature, of Literature, and of the Fine Arts, in all their forms. Postponing them as we do to things that bear more vitally upon human welfare: and bringing everything, as we have, to the test of actual value; it will perhaps be inferred that we are inclined to slight these less essential things. No greater mistake could be made, however. We yield to none in the value we attach to æsthetic culture and its pleasures. Without painting, sculpture, music, poetry, and the emotions produced by natural beauty of every kind, life would lose half its charm. So far from thinking that the training and gratification of the tastes are unimportant, we believe the time will come when they will occupy a much larger share of human life than now. When the forces of Nature have been fully conquered to man's use—when the means of production have been brought to perfection—when labor has been economized to the highest degree—when education has been so systematized that a preparation for the more essential activities may be made with comparative rapidity—and when, consequently, there is a great increase of spare time; then will the poetry, both of Art and Nature, rightly fill a large space in the minds of all.

But it is one thing to admit that æsthetic culture is in a high degree conducive to human happiness; and another thing to admit that it is a fundamental requisite to human happiness. However important it may be, it must yield precedence to those kinds of culture which bear more directly upon the duties of life. As before hinted, literature and the fine arts are made possible by those activities which make individual and social life possible; and manifestly, that which is made possible, must be postponed to that which makes it possible. A florist cultivates a plant for the sake of its flower; and regards the roots and leaves as of value, chiefly because they are instrumental in producing the flower. But while, as an ultimate product, the flower is the thing to which everything else is subordinate, the florist very well knows that the root and leaves are intrinsically of greater importance; because on them the evolution of the flower depends. He bestows every care in rearing a healthy plant; and knows it would be folly if, in his anxiety to obtain the flower, he were to neglect the plant. Similarly in the case before us. Architecture, sculpture, painting, music, poetry, &c., may be truly called the efflorescence of civilized life. But even supposing them to be of such transcendent worth as to subordinate the civilized life out of which they grow (which can hardly be asserted,) it will still be admitted that the production of a healthy civilized life must be the first consideration; and that the knowledege conducing to this must occupy the highest place.

However fully we may admit that extensive acquaintance with modern languages is a valuable accomplishment, which, through reading, conversation, and travel, aids in giving a certain finish; it by no means follows that this result is rightly purchased at the cost of that vitally important knowledge sacrificed to it. Supposing it true that classical education conduces to elegance and correctness of style; it can not be said that elegance and correctness of style are comparable in importance to a familiarity with the principles that should guide the rearing of children. Grant that the taste may be greatly improved by reading all the poetry written in extinct languages; yet it is not to be inferred that such improvement of taste is equivalent in value to an acquaintance

with the laws of health. Accomplishments, the fine arts, *belles-lettres*, and all those things which, as we say, constitute the efflorescence of civilization, should be wholly subordinate to that knowledge and discipline in which civilization rests. *As they occupy the leisure part of life, so should they occupy the leisure part of education.*

THE KNOWLEDGE REQUISITE FOR PURPOSES OF DISCIPLINE.

7. We may be quite sure that the acquirement of those classes of facts which are most useful for regulating conduct, involves a mental exercise best fitted for strengthening the faculties. It would be utterly contrary to the beautiful economy of Nature, if one kind of culture were needed for the gaining of information and another kind were needed as a mental gymnastic. Everywhere throughout creation we find faculties developed through the performance of those functions which it is their office to perform; not through the performance of artificial exercises devised to fit them for these functions. The Red Indian acquires the swiftness and agility which make him a successful hunter, by the actual pursuit of animals; and by the miscellaneous activities of his life, he gains a better balance of physical powers than gymnastics ever give. That skill in tracking enemies and prey which he has reached by long practice, implies a subtlety of perception far exceeding anything produced by artificial training. And similarly throughout. From the Bushman, whose eye, which being habitually employed in identifying distant objects that are to be pursued or fled from, has acquired a quite telescopic range, to the accountant whose daily practice enables him to add up several columns of figures simultaneously, we find that the highest power of a faculty results from the discharge of those duties which the conditions of life require it to discharge. And we may be certain, *à priori*, that the same law holds throughout education. The education of most value for guidance, must at the same time be the education of most value for discipline.

THE PROMINENT VALUE OF SCIENCE.

8. To the question—What knowledge is of most worth?—the uniform reply is—Science. This is the verdict on all the counts. For direct self-preservation, or the maintenance of life and health, the all-important knowledge is—Science. For that indirect self-preservation which we call gaining a livelihood, the knowledge of greatest value is—Science. For the due discharge of parental functions, the proper guidance is to be found only in—Science. For that interpretation of national life, past and present, without which the citizen can not rightly regulate his conduct, the indispensable key is—Science. Alike for the most perfect production and highest enjoyment of art in all its forms, the needful preparation is still—Science. And for purposes of discipline—intellectual, moral, religious—the most efficient study is, once more—Science.

And yet the knowledge which is of such transcendent value is that which, in our age of boasted education, receives the least attention. While this which we call civilization could never have arisen had it not been for science; science forms scarcely an appreciable element in what men consider civilized training. Though to the progress of science we owe it, that millions find support where once there was food only for thousands; yet of these millions but a few

thousands pay any respect to that which has made their existence possible. Though this increasing knowledge of the properties and relations of things has not only enabled wandering tribes to grow into populous nations, but has given to the countless members of those populous nations comforts and pleasures which their few naked ancestors never even conceived, or could have believed, yet is this kind of knowledge only now receiving a grudging recognition in our highest educational institutions.

C.

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XV. MILITARY SYSTEM AND SCHOOLS IN AUSTRIA.

I. OUTLINE OF MILITARY SYSTEM.

The Austrian Army is recruited by conscription, the period of service being for eight years, with two years in addition for the reserve; but such soldiers as wish it may generally obtain leave after six years' service. Those who serve eight years are understood to have a claim for employment on railways and in the custom-houses. Substitutes are allowed, but they are provided solely by the State, and the means used for supplying them is made an element towards securing good Non-Commissioned Officers for the Austrian Army, in the following manner.

The sum paid over by private individuals for avoiding service in the Army is £150 (1,500 florins,) and the Government, in providing a substitute, pays him the *interest* of this sum during his period of service, and the *capital* when it is completed. A good substitute is permitted to serve twice, and he may thus receive £300 (3,000 florins) when he quits the army. Generally speaking, the substitutes provided by the Government are good Non-Commissioned Officers, who by these means are induced to continue a length of time in the service.

The Officers are obtained during a state of peace, either from the Military Academies, or by direct entry as Cadets, after passing a slight examination, into the regiments of infantry and cavalry, in which capacity they perform the ordinary duties of soldiers, and no particular period of service is required in this grade. The entry as Cadets is by nomination, part by the Colonels, proprietors of Regiments; part consisting of those having claims on the Regiments; and part of those recommended from the ranks.

Those who join the Army from the Military Academies consist principally of the sons of military men, whose education is mainly provided for by the State, and of others who are placed there by means of funds provided by provinces, districts, municipalities, or private individuals.

Any Austrian subject has a *claim* for admittance, on payment of the annual sum prescribed by the regulations.

There is no fixed proportion existing between the Infantry and Cavalry officers supplied from the Military Academies, and those entering regiments directly as cadets, but it is understood that the former do not amount to more than one-twentieth or one-thirtieth of the latter.

The Artillery and Engineers are now entirely supplied with officers from the Military Academies.

There is no difference in the pay of officers of the same rank in the various arms in Austria.

Officers when not required are placed on half-pay, which is rather less than the half of their actual pay whilst serving. When an officer dies, his widow is not entitled to a pension, but the state provides for the education of the children; and to prevent distress, an officer is not permitted to marry unless he has a certain income, independent of his pay, for the maintenance of his wife.

The promotion in the Infantry and Cavalry is regimental, and usually by seniority; but there is no doubt that promotion by selection also takes place, though not in the regiment itself, the officer selected being promoted into another regiment. The promotion in the Artillery and Engineers is also by seniority, and by corps, and, until the Hungarian war, was exceedingly slow.

Although not actually sanctioned by the authorities, cases have occurred in the Austrian service where officers have purchased steps from others serving in *different* regiments to themselves in the following manner:—if any officer is about to retire from the service, the promotion in the regiment being by seniority, the officer whose turn it would be to obtain the promotion would frequently sell his right to a junior officer serving in another regiment, who would thus be promoted into the vacancy. We were informed that this system had formerly led to frequent duels between the officer obtaining the promotion, and those officers in the regiment whose prospects were directly injured, by the senior having sold his promotion, and thus stopped their advancement.

II. OUTLINE OF SYSTEM OF MILITARY EDUCATION.

Military education in Austria has been entirely remodeled since the Hungarian war, and is now conducted in a very regular and systematic manner under the sole control and supervision of the Fourth Section of the Supreme War Department, entitled "Military Schools."

The establishment consists besides of—

2 Majors of Infantry.
1 Captain of Artillery.

2 Captains of Infantry.
2 Lieutenants of Infantry.
2 Employés belonging to the Administration.
6 Clerks.
6 Messengers.

To show the great importance of the Fourth Section, it will only be necessary to state that the disbursements of the government for Military Education in Austria for the current year are estimated at £281,440, (2,814,400 florins,) without taking into consideration the sums contributed for foundations by provinces, districts, and private individuals, or of those received for the education of paying students. This sum of 2,814,400 florins is apportioned in the following manner:—

	Florins.*	Number of Students.
Vienna Staff School,	43,000	30 Officers.
ACADEMIES—		
Wiener Neustadt, for Infantry and Cavalry,	256,000	400 Students.
Znaim, Engineers,	157,000	200
Olmutz, Artillery,	122,000	200
Trieste, Marine,	73,000	100
4 Cadet Houses, at 87,000f.,	348,000	800
SCHOOL COMPANIES—		
6 Infantry, at 33,000f.,	198,000	720
1 Cavalry, " 39,000f.,	39,000	60
2 Frontier, " 35,000f.,	70,000	240
SCIENTIFIC SCHOOL COMPANIES—		
5 Artillery, at 35,000f.,	175,000	600
1 Engineer, " 36,000f.,	36,000	120
1 Pioneer, " 36,000f.,	36,000	120
1 Flotilla, " 22,000f.,	22,000	60
1 Marine, " 40,000f.,	40,000	150
1 NON-COMMISSIONED OFFICERS' OR TEACHERS' SCHOOL, WIENER NEUSTADT.	17,000	60
12 UPPER HOUSES OF EDUCATION, at 49,500f.,	594,000	2,400
12 UNDER HOUSES, " 25,700f.,	308,400	1,200
	2,534,400	7,430
Bureau of the Fourth Section,	280,000	
Total,	2,814,400 =	£281,440

So that the annual cost to the state for the education of an officer student, cadet, non-commissioned officer, and boy in these various schools is as follows:—

	£	s.	d.
Student Officer at the Staff School,	143	6	0
Student at the Engineer Academy,	78	10	0
" " Artillery Academy,	61	0	0
" " Infantry and Cavalry Academy,	64	0	0

* A florin is equal to two shillings of English money.

	£	s.	d.
Student at the Marine Academy,	48	6	0
Cadets at the four Cadet Houses,	43	10	0
SCHOOL COMPANIES—			
An Infantry School Company Student,	27	10	0
A Cavalry " " "	65	0	0
A Frontier " " "	29	4	0
An Artillery " " "	29	4	0
An Engineer " " "	30	0	0
A Pioneer " " "	30	0	0
A Flotilla " " "	36	12	0
A Marine " " "	26	12	0
A Non-Commissioned Officer at the Teachers' School,	28	6	0
A Boy at the Upper Houses of Education,	29	14	0
" Lower " "	25	14	0

And thus, as the course of instruction is continued for four years in the Cadet Houses, four years in the Academies, and two years in the Staff School, the cost of training the Officers in the Austrian Army is—

	£
For an Officer of Artillery, about	420
" " Engineers,	490
" " Infantry or Cavalry,	430
" " Marine,	370
" " the Staff,	710

From the Bureau of this Section at Vienna all orders for the management, maintenance, discipline, studies, and regulation of the various Schools and Academies are issued; and all details relating to the progress of the several students and the results of their examinations are periodically sent and regularly examined.

THE IMPERIAL INSTITUTIONS FOR MILITARY EDUCATION.*

The Imperial institutions for Military Education, are divided into Three Classes. They are—

A. Such Institutions as are immediately intended for the education of pupils as Non-commissioned Officers; namely,

(1.) The Lower Military Houses of Education.
(2.) The Upper Military Houses of Education.
(3.) The School Companies.

B. Institutions in which it is intended to educate pupils as Officers; namely,

(1.) The Cadet Institutions.
(2.) The Military Academies.

* The following account is translated from "*Die Kaiserlich-Königlichen Militär-Bildungs-Anstalten, mit besonderer Rücksicht auf die Vorschriften für den Eintritt in dieselben, Zusammengestellt aus den allerhöchst sanctionirten Reglements der Militär-Bildungs-Anstalten. Wien*, 1854." (*The Imperial Military Institutions for Education*, with special reference to the conditions required for admission, compiled from the regulations sanctioned by His Majesty. Vienna, 1854.)

C. Such Institutions as partly give a special kind of instruction, and partly complete and carry out the previous education of Officers. These are—

(1.) The Institution for Military Teachers.
(2.) The Higher Course for the Artillery and Engineers.
(3.) The War School.

In the institutions of the first and second class, education as well as instruction is given, but those of the third class are limited to instruction; accordingly, all that is said in the following pages with regard to the admission of pupils, and with regard to beneficial foundations, has no reference to institutions of the third class.

Although each of the first-named classes forms a complete whole in itself, yet they stand in close mutual relation to each other, inasmuch as the most distinguished pupils of the Lower Houses of Education pass into the Cadet Institutions; and in the same way the most distinguished scholars of the Scientific* School Companies, viz., those of the Artillery, Engineers, Pioneers, Flotilla, and Marine Schools, may be transferred as attendant pupils† to the Academies; by this means they may obtain a right to a position in the Army as Officers.

So, on the other hand, insufficient progress may be a reason for scholars being removed from the Cadet Institutions and the Academies into the Upper Houses of Education and the School Companies.

By these regulations a road is opened for the advancement of any talent that may gradually develop itself; and at the same time the pupils of the Institutions for Higher Military Education are submitted to that process of elimination which is requisite for the success of these Institutions.

The pupils in the Institutions for Military Education are either foundation pupils,‡ or paying pupils; the first are divided into the

* *Techniche* (technical) is the original word. Compare its use in another matter; there are in the Artillery two services, the ordinary Campaigning Artillery and the *Technical* Artillery.

† *Frequentanten*, who frequent, attend, or visit the school.

‡ *Stiftlinge*, foundationers, and *Zahlende*, paying pupils, the first divided into, (1.) *Militär-Ararial* foundationers, who are, as a rule, sons of Soldiers and Officers, and are maintained at the expense of the Military Treasury, the *Arar*, or *Ærarium*; (2.) Provincial foundationers, who are maintained by the interest of lands or money granted in favor of young men belonging to some particular province, Bohemia, Gallicia, the Tyrol, Upper or Lower Austria, either by the Central Government (the State,) or by the Estates or Parliament (*Stände*) of the province; (3.) Private foundationers, under which name are included not only those maintained by moneys left by private individuals, but those also whose payments come from grants made by municipal and local corporations.

military or treasury foundation pupils, and the provincial and private foundation pupils.

The military or treasury places belong to the army; the claim for these depends upon the nature of the institution and the position of the parents. As a general rule, it may be laid down that children of officers are expected to remain up to eleven years of age under the care of their parents, whereas those of common soldiers may in the eighth year of their age be taken under the protection of the State.

The provincial foundations are bestowed upon the sons of the nobility, or of distinguished *employés* of the state belonging to the crown lands of the province. Private foundations are those established by private individuals or corporations, and the appointment to these depends upon the conditions laid down by the founder. The capital or property of these foundations is generally administered by the Supreme War Department.*

Every Austrian subject may claim admission as a paying pupil, if the other conditions of admission are fulfilled in his case.

In the Lower Houses of Education there are only military or treasury places.

In the Upper Houses of Education there are 1,800 military places; the remaining 600 are filled up by pupils upon provincial or private foundations, and by paying pupils.

In the School Companies the number of the foundation places and paying places is not fixed.

In the Cadet Institutions and the Academies there are 900 full and 200 half military places, and 520 places for pupils on provincial and private foundations, and for paying pupils.†

A sum to cover the expenses is fixed in the case of the pupils on the provincial and private foundations, as also for the paying pupils, amounting in the Houses of Education and in the School Companies to 150 florins (15*l.*) per annum; in the Cadet Houses to 400 florins (40*l.*) per annum; in the Academies 600 florins (60*l.*) for each of the three first years, and 800 florins (80*l.*) for the last year. These payments will be subject to modifications, at considerable intervals of time, according to the price of articles of consumption, and will be drawn in the case of the pupils on the provincial foundations

* The *Ober-Militär Commando*, or *Commandership-in-chief*, the Fourth Section of which has the charge of Military Education. *Commando* is the German word corresponding to Commander, as *Ministry* does to *Minister*, and may signify one or more persons, a single Officer, or a Board of Commissioners.

† Making a total of 1,620, to which may be added about 80, reserved for *Frequentanten* from the School Companies.

from the funds of the respective provinces, and in the case of the pupils of the private foundations, from the moneys belonging to the private foundations.

The capital for the provincial and private foundations must be duly secured and sufficient in amount to cover the fixed payments for the number of places determined upon. Supposing the sum contributed to be insufficient, the requisite sums must be obtained by deferring any further nominations.* The proper sums in discharge of these contributions must be paid in advance, half-yearly, on the 1st of October and the 1st of April. Those which belong to the provincial foundations, and such private ones as are administered by trustees, must be paid into the nearest Military Chest.† In the case of those pupils who pay for themselves, the money must be sent precisely on the above-mentioned days to the Commandant, or Director of the School, without reference to the day on which the pupil may have entered the school. On the other hand, in cases where a pupil either is removed from or otherwise quits the institution before the natural time, restitution will be made of the corresponding proportion of the sum paid in advance.

For admission into a Military Educational Institution, the boy must first of all be of the age specified for the institution in question, and must further possess the proper bodily growth and strength corresponding to that age, and the prescribed amount of knowledge. Every boy who is to be offered as a candidate for a military place must first be registered, and this in the course of the same year for which his admission is desired. This registration must be made by the parents or guardians through the Commanding Officers of the Army,‡ or Army-Corps, or Military Government§ within whose district they are domiciled, or in case of their living in foreign parts, through the Austrian Legation of the country.

Applications thus made must state what is the institution, admission into which is desired, and must be accompanied by the following certificates:—1. Baptismal certificate. 2. Certificate of vaccination. 3. Certificate of bodily health, by a Military Surgeon. 4.

* The interest, that is, will be allowed to accumulate, until a sufficient sum is provided to pay for the maintenance of a pupil.

† Such as exist in most large towns.

‡ There are four *Armies;* the First in the west, with its head-quarters at Vienna; the Second in Italy, with its head-quarters at Verona; and two others in the eastern provinces. Each of these is divided into a certain number of Army-Corps. The particulars may be seen in Schematismus or Military Calendar, and briefly in the Almanach de Gotha.

§ In those parts of the Empire, namely, in the so-called Military Frontiers, the old Turkish border, where the government is simply military.

The school certificate for the last half-yearly examination: And 5. On the reverse the following declaration:—

"I hereby pledge myself to surrender up my son (*or* ward) to the Imperial Military Service, in case of his being admitted into a Military Educational Institution; and I declare that I will under no pretext require his return."

The object of this declaration is, on the one hand, to secure permanent elements for the Military Educational Institutions, and to create in the minds of the relations of the candidates the seriousness of purpose so essential in the choice of a profession. The declaration will also serve to retain the pupils to a course, which they have usefully commenced, and to protect them from the consequences of hasty decisions on the part of their friends. On the other hand, if it appears manifest that a pupil has not the requisite inclination or qualification for the military service, his removal from the institution ensues with or without the request of his friends, as will be more fully explained further on.

The applications will be examined by the Commanding Officers of the Army, or the Army Corps, or Military Government, and after their revision the candidates will be registered and the petitioners duly informed.

Any changes which occur in the case of the registered candidate, or in his family circumstances, between the time of registration and of actual admission, are to be made known to the authorities before whom the application was brought.

The registers are to be submitted to the Supreme War Department in the middle of June, so that applications can be received by the Commanding Officers of the Army, or Army Corps, or Military Government, at the utmost only up to the end of May.

Appointments to the military places in the Houses of Education and the School Companies are made by the Supreme War Department; His Majesty the Emperor reserves for himself those in the Cadet Institutions and the Academies.

Vacancies in the provincial foundation places are advertised, and applications called for, by the Governors or by the Standing Committees of the Estates of the respective provinces.*

All proposals made in this manner are forwarded to the Minister

* The Governor or Lord Lieutenant (the *Statthalter*) is the ordinary representative of the Emperor in the various provinces composing the Empire. In his hands resides the usual administration of the government. The provinces have also their ancient Estates or Parliaments, Standing Committees of which might, under certain circumstances, sit at times when the Estates were not assembled.

of the Interior, and submitted by him for the sanction of His Majesty.

Appointments to the private foundations are made by the person specified by the founder; decisions of this kind are submitted on or before the 15th of June, to the Supreme War Department for their approval of the candidates and distribution of them into the various institutions.

If a candidate in whose case the prescribed conditions of admission are not fulfilled is nominated to a private foundation, and his nomination consequently not approved, a new nomination must be made.

Pupils who pay are appointed by the Supreme War Department.

The sanction of the appointments and the distribution of the candidates appointed in the various institutions, in the case of the military and the paying pupils, will be made known to them by the Commanding Officers of the Army, or Army Corps, or Military Government; in the case of the provincial foundations by the Minister of the Interior; and in the case of the private foundations by the trustees.

Candidates living in a foreign country will be informed by the Legation in that country.

Upon the appointment made to an entirely gratuitous place in a military educational institution, all payments of allowances for the education of children cease.*

The conveyance of military foundation pupils to the school to which they are appointed will, if not provided for by the friends of the pupils, be made at the expense of the Military Treasury by the ordinary means of locomotion.

Trustworthy Non-commissioned Officers from the nearest detachment of troops should be selected by the military authorities for the conveyance and charge of the pupils; four or five being, according to the circumstances, committed to the care of a single superintendent.

The conveyance of all other pupils must be provided for by their friends.

Admission into the Military Educational Institutions takes place only at the commencement of the school year. Candidates admitted must present themselves in their respective institutions between the 15th and the 30th of September.

* Small allowances, *e. g.* of 8*l.* for three years, are very generally made to the widows of officers, and occasionally to officers themselves, to assist them in securing a decent education for their children.

The Commanding Officers of the Army, or Army Corps, or Military Government have to take care that every candidate admitted to a military place shall, before leaving to join the institution, be a second time examined by an Army Surgeon, and shall only be allowed to proceed to the institution in case of his bodily qualifications being found perfectly sufficient.

Finally, the candidate upon presenting himself must be re-examined by the chief Medical Officer of the institution, and if he is hereby found to be unqualified for military education, will not be received.*

Any Military Surgeon or Medical Officer who incurs the guilt of neglect of his duty in this particular will be held responsible.

Every candidate upon presenting himself will moreover undergo the prescribed examination in his previous studies, and if his previous education appears insufficient, his appointment will be cancelled.†

Pupils admitted after a private education into a Military Institution are provided by this institution with new linen and clothes. All clothes they bring with them are without exception to be returned to their friends, and an acknowledgment of the return given.

No pupil in any of the Military Institutions is allowed to possess any linen or clothes except what is provided; and the friends and relations are not to be called upon for any sort whatever of additional contribution. An amount of pocket-money, varying with the character of the institution, may be transmitted to the pupils through the hands of the authorities of the school; but this is entirely at the pleasure of the friends and relations; all necessaries being provided by the institution.

The pocket-money can only be paid to the pupil through the Commanding Officer of the Institution or of the Company.

The amount allowed must depend on the conduct of the pupil, but must not, even in the Academies, exceed three florins (six shillings) a month.

The course of instruction given in the Military Educational Institutions is fixed by special tables drawn up for each institution. Special text-books, to be followed in the courses, are also appointed.

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* Thus, it will be seen, all candidates appointed to the military places in the schools are examined three times over by a medical officer. Where the State does not pay, in the case of provincial or private foundations, or of paying pupils, the same amount of precaution is not thought necessary.

† The difficulties of traveling appear to be considered in Austria too great to allow of any examination (competitive or otherwise) before the candidates provisionally admitted actually arrive at the school to which they are appointed; if ill qualified, they are dismissed with the chance of a second trial.

The tables drawn up to regulate the course of instruction are subject to such modifications as may be called for by the requirements of science and by improvements in the methods of teaching.

The scholars will also receive in the course of the year, more particularly in summer, and after the close of the examination, practical instruction suitable to the arm of the service for which they are destined.

Every September the pupils pass into the next succeeding yearly course.

In the same month the scholars quit the institutions, and are either placed in the army or transferred to other institutions. The conditions under which this is done are given in detail in the account of each institution.

The expenses of the conveyance of the pupils from one institution to another are borne by the Treasury.

Pupils who make no progress in scientific studies will be required to enlist in the army* if old enough, and if not, will be removed to an inferior Military Educational Institution; or if they are already in one of the Houses of Education or School Companies, will be employed in learning some trade which will be of use in the army,† and when they have reached the proper age, will be enlisted.

Pupils whose want of bodily qualification unfits them for the army will be sent back to their parents or guardians. Those holding military places in the Academies, if their parents are entirely unable to provide for them, will receive a yearly pension of 150 florins (15*l.*) until they can be placed in some employment under the State at a salary at least equivalent to this sum.

Pupils out of the Military Houses of Education or School Companies, who are removed for want of bodily qualification, and whose parents are entirely unable to provide for them, will, according to their capacities, be placed either in the Accounts Department‡ or some similar Military Department, in the Geographical Institution, or as drummers or clerks in one of the higher Military Schools, or will be taught some trade for employment in the Outfit Department,§ or will be made teachers. If, however, the pupil's bodily disqualifica-

* Will be *assentirt*, will take the oath. They are considered old enough for this at sixteen.

† Even clothes and shoes being made by soldiers; a considerable number of soldiers were found thus employed, for example, at the Artillery Academy at Olmütz, under the superintendence of a master workman, bearing a non-commissioned grade, that of a *prima-planist*, for whom, see a Note further on.

‡ *Militär Rechnungs Branche.*

§ *Monturs Commission*, charged with the duty of providing arms, clothing, &c., for the army. There are several establishments in various parts of the Empire. One of the largest is at Stockerau, near Vienna.

tion be of a nature to incapacitate him for any of the above-mentioned employments, he will be removed at the expense of the Treasury into some Civil or Military Hospital.*

If in moral respects a pupil is found to be a mischievous member of the institution, he may at any time in the course of any year be removed.

Pupils who pay, in case of their removal being found, for whatever reason, necessary, will be sent home to their friends, the consent of the friends being required before they can be either engaged as soldiers or removed to one of the lower institutions. The expenses already incurred will be deducted from the payment made in advance, and the balance repaid to the parents or guardians.

A pupil who for whatever reason has once been removed from a Military School can never be afterwards admitted into any one of them, and in case of his either then or afterwards enlisting in the army, he can not, under any pretext whatever, obtain the rank of Officer before the pupils of the year to which he belonged. This rule, in the case of pupils who have been transferred from a higher to a lower institution, even when they pass out of this latter in the regular course, must be observed in reference to the pupils of the year to which they belonged in the institution from which they were removed.†

A. SCHOOLS FOR NON-COMMISSIONED OFFICERS.

1. *The Lower Military Houses of Education.*

The twelve Lower Military Houses of Education contain, as has been said, only military places.‡ These appertain, in the first instance, to the legitimate sons of all soldiers bearing arms,§ whether born in marriage of the first, or in marriage of the second degree.‖

* Into a *Siechen-haus*, a hospital for incurable cases; or an *Invaliden-haus*, for *Invalides*.

† A pupil who was removed from the Academy at Wiener Neustadt might, for example, enter the army as a simple Cadet, under the patronage of the Colonel of a regiment, and might, but for this rule, receive rapid promotion, and become the senior in rank of his comrades of the same year at the School. In like manner, a pupil removed from a Cadet Institution and transferred into a School Company, might, upon leaving that, under certain circumstances, outstrip his late comrades at the Cadet Institution.

‡ That is, all the pupils are of military or quasi-military birth, and the expense is borne by the State. Both these and the Upper Military Houses are to be reduced, it is said, to ten.

§ The whole body (*Mannschaft*) of soldiers bearing arms (*Feuergewehrstand.*)*

‖ Marriage of the first degree is that entered into with full permission. In this the wives live in the barracks, receive a certain amount of rations, their children are recognized, and in case of the father's death are admitted into the Orphan Schools. Soldiers, are, however, occasionally allowed to marry, on condition of surrendering every claim to the above-mentioned privileges. This constitutes marriage of the second degree.

Subordinately to these, a lawful claim exists in the following cases:—

1. Sons of soldiers serving in the Trabant Body Guard, the Court Watch, the Outfit Commission, and other military bodies.*
2. Sons of fathers belonging to the Reserve,† without prejudice, however, to sons of soldiers in actual service.
3. Sons of invalided soldiers,‡ not only in cases where the father has already married at the date of his reception as invalided, but also in those where marriage has been subsequently permitted.
4. Sons of those who have either as substitutes or otherwise served double time, and are now in the employment in connection with the Court or Government, even in cases where marriage has been contracted after quitting the service.
5. Sons of men belonging to the military service, not included in the above-mentioned cases, namely, the sons of Prima-planists,§ Employés, and Officers.

In any large number of candidates special regard should be had to the sons of fathers who have been killed or invalided on the field; after these, to those who are orphans on both sides; then to the sons of substitutes and other soldiers in actual services; and last follow in order the sons of fathers either belonging to the Reserve or received as Invalides, or otherwise connected with the Military Service.

As the sons of Officers serving with the sword‖ have a large number of places reserved for their benefit in the Cadet Institutions and the Academies, their admission into Military Houses of Education, more especially into the Lower House of Education, is only allowable when no prejudice is caused to the above-mentioned claimants, and as a general rule can only take place when they are orphans, or under special circumstances.

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* The *Trabanten-Leibgarde* and the *Hofburgwache* are Court troops. For the *Monturs Commission*, see a previous Note.

† Soldiers enlist for eight years, and after this to the end of the tenth year are on the Reserve.

‡ That is, belonging to the Hospitals or Hotels des Invalides, the *Invaliden-häuser*, of which there are several.

§ Prima-planists, a name derived from *prima plana*, the first leaf of the list, is given to soldiers employed in various special duties, especially perhaps those not of a strictly military kind. The master tailors, master shoemakers, master farriers, are all *prima-planisten*. The surgeon's assistant ranks as such. The grade is superior to that of sergeant, but those who hold it are excluded from promotion to a commission.

‖ This is a frequent phrase (*mit dem Degen dienende*) for active service.

The age of admission is the completion of the seventh year. Children under this age who are orphans on both sides, or whose fathers being widowers, have to serve in the field, will be received into the Orphan House at Vienna, and be transferred on completing their seventh year to the Lower Houses of Education. Children who have passed the prescribed age for admission into the first class of the Lower Houses of Education can only be admitted, in case of their possessing the requisite amount of knowledge, into the classes corresponding to their age, and in case of there being places vacant in these classes; any addition to the prescribed numbers in the respective years is not allowable.

The number of pupils in each of the Lower Houses of Education is fixed at 100. These 100 pupils are divided into four years, each year being as nearly as possible of the same numerical strength.

The command is held by a Subaltern Officer, to whom are attached for the religious education, the medical care, the discipline, and the instruction—

1 House Chaplain,
1 Army Surgeon,
4 Sergeants and Instructors,
4 Honorary Sergeants* as Assistant Instructors,
1 Sergeant, as House Adjutant; and
6 Corporals, for the discipline.

Additional assistance may be procured for managing the house and attending on the pupils.

To conduct the instruction (which will be almost entirely addressed immediately to the senses of the children) class-teachers will be provided for each yearly course; and these, with the house chaplain and the medical officer, aided by assistant teachers, will give the pupils instruction in the following subjects:—

1. Religious Knowledge. 2. German. 3. Natural History. 4. Geography. 5. Arithmetic, both ordinary and mental. 6. Writing. 7. Common Drawing. 8. First Notions of the Rules of Drill. 9. Gymnastic Exercises and Swimming.

2. *Upper Military Houses of Education.*

These, twelve in number, form a continuation to the Lower Houses of Education, the pupils from which are admitted here at the close of their eleventh year.

At this age foundation pupils of every kind, as also paying pupils, may be admitted immediately from their parents' homes, only, however, into the first year's course, and after passing an examination in

* *Feldwebel*, Sergeant; *qua Feldwebel*, Honorary Sergeant, with the title and distinction in the uniform, but without the pay.

the subjects taught in the Lower Houses of Education, to the same extent up to which they are taught in the second class of the ordinary elementary school.

The claim to a military place in an Upper House of Education, is similar to that for a military place in a Lower House of Education.

The number of pupils is fixed at 200 in each Upper House of Education, divided in like manner into four yearly courses.

The command is intrusted to a Captain, who is aided, for purposes of instruction and superintendence, by—

2 Subaltern Officers.
1 House Chaplain.
1 Army Surgeon.
1 Surgeon's Assistant.
4 Sergeants as Teachers.
2 Honorary Sergeants as Assistant Teachers.
1 Sergeant as House Adjutant.
8 Corporals, for discipline.

Additional assistance may be procured for managing the house and for attendance, upon the same scale as in the Lower Houses.

The instruction, as in all the Military Schools to be noticed henceforward, will be given by teachers specially assigned to each subject, and will include here the following subjects:—

1. Religious Knowledge. 2. German, with written compositions. 3. One of the other Languages of the Empire. 4. Natural History. 5. Geography. 6. History. 7. Arithmetic. 8. Military Rules and Regulations. 9. Rules of Drill, and first notions of the Rules of Military Exercise. 10. Writing. 11. Common Drawing. 12. Gymnastic Exercises, Single-stick,* Swimming.

After completing their fourth year course, the pupils are transferred, according to their qualifications and their own wishes, into the School Company.

Entrance into the Marine School Company takes place at the end of the second year's course.

3. *The School Companies.*

The School Companies have the object of furnishing the different arms of the service with Non-commissioned Officers well educated, both practically and theoretically, and likely in the course of time to prove useful Commissioned Officers† in charge of the troops.

They are in all twenty in number:—

6 for the Infantry.
3 " Cavalry.

* *Stock-fechten*, or staff-fencing; a sort of military single-stick, the staff used resembling a musket and bayonet in one piece, all of wood.

† *Truppen-Officiere.*

2 for the Frontier Troops.
5 " Artillery.
1 " Engineers.
1 " Pioneers.
1 " Flotilla.*
1 " the Marine Service.†

Under the general term of School Companies the School Squadrons (for the Cavalry) are included. The term Scientific‡ School Companies applies only to those of the Artillery, Engineers, Pioneers, Flotilla, and Marine.

The scholars in the School Companies are either pupils or attendants.§ The pupils are taken, as already described, from the Upper Houses of Education, after the close of their fourth year's course, (or, in the case of the Marine School Company, after that of the second,) or they come direct from places of private education.

The conditions for gratuitous admission from private educational institutions into the School Companies are similar to those for admission into the Houses of Education, with the difference, that in the School Companies the sons of officials in the civil service, who have served long and meritoriously, and are ill-provided for, may also claim military places.

The candidates must be not under fifteen and not above eighteen years of age; in the Marine School Company not under thirteen and not above fourteen.

The Attendant pupils (*frequentanten*) come from the soldiers of the Standing Army.‖ They exist only in the School Companies of the Artillery, Engineers, Pioneers, and Flotilla; to be admissible, they must, as a rule, have passed with credit through the Non-commissioned Officer Schools of the Artillery or Engineer regiments, or of the Pioneer Corps or Flotilla Corps; they must have been not more than two years in the service; and not at the utmost be above the rank of an Upper Cannoneer, an Exempt, or an Upper Pioneer.¶

* For service on the Lower Danube, the Po, and the Italian Lakes and Lagoons.

† Both for service in the Fleet and in the Coast Defenses.

‡ *Technische*, Technical or Artificer Companies.

§ *Zöglinge* and *Frequentanten.*

‖ The *Mannschaft-stand* is a term used to mean the whole body of Private Soldiers and Non-commissioned Officers.

¶ The Non-commissioned Officers in the Austrian service rank as follows:—
In the Infantry, Corporal, and Sergeant (*Feldwebel:*)
In the Cavalry, Corporal, and *Wachtmeister:*
In the Artillery, Corporal, and *Feuerwerker:*
But there are distinctions in addition. A private soldier who is exempted from certain duties, *e. g.* from standing sentry, bears the name of *Gefreite*, or Exempt, in the Infantry and in the Engineers; the corresponding rank to which in the Artillery is an Upper Cannoneer (*Ober-Canonier,*) and in the Pioneers, an Upper Pioneer (*Ober-Pionier.*) These are in no case Non-commissioned Officers, though in the way to become so. There are also Vice-Corporals

The admission of Attendants (*frequentanten*) can only be allowed without prejudice to the claims of candidates from the Upper Military Houses of Education and from places of private education.

Pupils who come direct from private education must, if they propose to enter one of the Scientific School Companies, be at least 4 feet 10 inches;* if one of the other School Companies, at least 4 feet 8 inches high. And these and the Attendant pupils alike must at their entrance into the School Companies pass an examination in the subjects of instruction taught in the Upper Houses of Education.

A perfect knowledge of German is accordingly an indispensable condition for reception into the School Companies, and can only in the single case of the Marine School Company be under certain circumstances overlooked.

At his entrance into the School Company every pupil takes the military oath, and is from this day bound to eight years' service in the Standing Army, and two years' service in the Reserve.

Each School Company is commanded by a Captain; each School Squadron by a Captain of Cavalry.

They have attached to them for purposes of instruction and discipline,—

In each	Infantry School Company,	3	Subaltern Officers.
"	School Squadron,	3	"
"	Frontier School Company,	6	"
"	Artillery "	6	"
In the	Engineer "	6	"
"	Pioneer "	6	"
"	Flotilla "	4	"
"	Naval "	4	"

Each institution is provided also with four Sergeants as teachers, together with a requisite number of additional persons required for management, discipline, and service.

Religious superintendence and instruction is intrusted to a local Ecclesiastic, and the medical duties to an Army Surgeon.

Scholars in the School Companies are to receive a practical as well as a theoretical training. This is to be regulated according to the branch of the service for which they are detained.

Each of the Infantry School Companies consists of 120 pupils, divided into two years, the subjects of instruction being—

1. Religious Knowledge. 2. One of the National Languages. 3. Geography and History of the Austrian State. 4. Arithmetic. 5. Elements of Geometry. 6. Military Correspondence and Management of the Internal

(Lance Corporals,) with the badge but without the pay of Sergeants, and *qua Feldwebels* or Honorary Sergeants, with the badge but without the pay of Sergeants.

* The Austrian foot or shoe (*schuh*) of 12 inches (*zoll*) is a little longer than the English: 80 Austrian make 83 English.

Affairs of a Company.* 7. Pioneer Service.† 8. Knowledge of the Arms of the Infantry. 9. Rules and Regulations. 10. Rules of Drill, Exercise, and Manœuvring. 11. Calligraphy. 12. Military Drawing. 13. Gymnastics, Fencing, and Swimming.

After the close of the course the pupils who have done remarkably well enter the Infantry as Corporals, the pupils who have done well as Exempts, with the corporal's badge; those who have done moderately, as Exempts; and those who have done either remarkably well, or well, will be, without further examination, named as Cadets‡ as soon as they pay down the sum required for outfit, or prove their legitimate claim to exemption from this outlay, they themselves being consenting parties.

The arrangements of the School Squadrons, with a number of 60 pupils in each, are analogous to those of the School Companies, special attention only being given to instruction in riding and practical exercise in the Cavalry service; for which purpose each Squadron is provided with 71 horses.

The first of the School Squadrons forms a Regiment of Dragoons, the second one of Lancers, and the third one of Hussars.

The subjects taught are as follows:—

1. Religious Knowledge. 2. One of the National Languages. 3. Arithmetic. 4. Elements of Geometry. 5. Geography and History of Austria. 6. Military Correspondence, and Management of the Internal Affairs of a Squadron. 7. Knowledge of Cavalry Arms. 8. Rules and Regulations. 9. Rules of Cavalry Drill, Exercise, and Manœuvring. 10. Knowledge of Horses and Grooming, of Bridling, Saddling, and Shoeing. 11. Calligraphy. 12. Military Drawing. 13. Riding. 14. Gymnastics, Fencing, and Swimming.

On leaving, the pupils enter the Cavalry in the grades corresponding to those mentioned above for the Infantry.

The Frontier School Companies, each of 120 pupils, give three yearly courses.

In all essential points, these institutions are organized on the same plan with the Infantry School Companies. As, however, Officers and Non-commissioned Officers on the Military Frontiers are also intrusted with the general administration, and accordingly require of necessity a knowledge of political administration, of jurisprudence, and agriculture, the range of the plan of study in the Frontier School Companies is more extensive.

The following subjects are taught:—

1. Religious Knowledge. 2. The Wallachian or Illyrian Language. 3. Aus-

* *Manipulation*. See the account of the visits to the School Companies.

† This includes pontooning.

‡ Cadets in a regiment, *i. e.* candidates for a commission, like those appointed on the nomination of the colonels.

trian Geography and History. 4. Arithmetic and Algebra. 5. Geometry, Plane Trigonometry, and Practical Mensuration. 6. Military Correspondence and Management of the Internal Affairs of a Company. 7. Arms and Munitions. 8. Pioneer Service, Road and Bridge Making. 9. Elements of Civil Architecture. 10. Agriculture. 11. Frontier Law and Administration. 12. Rules and Regulations. 13. Rules of Drill, Exercise, and Manœuvring. 14. Calligraphy. 15. Military Drawing. 16. Gymnastics, Fencing, Swimming.

The pupils of the Frontier School Companies, at the close of their third year, enter the Frontier Troops, under the conditions already stated in the case of the Infantry School Companies.

The Artillery School Companies have a course of three years, and consist each of 120 scholars (pupils and attendant pupils.)

The subjects of study are—

1. Religious Knowledge. 2. The Bohemian Language.* 3. Austrian Geography and History. 4. Arithmetic and Algebra. 5. Geometry, Plane Trigonometry, and Practical Mensuration. 6. Popular Mechanics, First Elements of Natural Philosophy and Chemistry. 7. Military Correspondence and Management of the Internal Affairs of a Battery or Company; Computation of Estimates. 8. Artillery. 9. Field Fortification. 10. Elements of Permanent Fortification; Attack and Defense of Fortresses. 11. Rules and Regulations. 12. Rules of Drill and Exercise. 13. Calligraphy. 14. Military Drawing. 15. Elements of Descriptive Geometry. 16. Grooming, Stable Duty, Harnessing. 17. Gymnastics, Fencing, Swimming.

After the close of the complete course, pupils who have done remarkably well enter the Artillery as Corporals, those who do well as Bombardiers, the others as Upper Cannoneers.

The most distinguished scholars, however, pass at the close of their second year into the Artillery Academy free of cost, as Attendant Pupils (*frequentanten*,) with the rank of Lance-Corporals, to receive there the education which will fit them for the rank of officers.

The Engineer School Company contains 120 scholars, distributed in three yearly courses. The subjects taught are—

1. Religious Knowledge. 2. Austrian History and Geography. 3. Arithmetic and Algebra. 4. Geometry, Plane Trigonometry, Practical Mensuration. 5. Military Correspondence and Management of the Internal Affairs of a Company. 6. Pioneer Service. 7. Sapping and Mining. 8. Elements of Permanent Fortification. 9. Civil Architecture. 10. Arms and Munitions. 11. Rules and Regulations. 12. Rules of Drill, Exercise, and Manœuvring. 13. Calligraphy. 14. Military Drawing. 15. Architectural Drawing. 16. Gymnastics, Fencing, Swimming.

The scholars enter the Corps of Engineers in the same way as has been described in the case of the other School Companies; the most distinguished passing as Attendant Pupils with the rank of Lance-Corporals, free of cost, into the Academy of Engineers.

* Because of the large number of Bohemians in the Artillery.

The Pioneer School Company also contains 120 scholars, similarly divided into three yearly courses.

The instruction given is similar to that of the Engineer School Company, special attention being paid to pioneering duties.

1. Religious Knowledge. 2. The Bohemian Language. 3. Austrian History and Geography. 4. Arithmetic and Algebra. 5. Geometry, Plane Trigonometry, and Practical Mensuration. 6. Popular Mechanics. 7. Military Correspondence and Management of the Internal Affairs of a Company. 8. Land Pioneering. 9. Water Pioneering.* 10. Arms and Munitions. 11. Rules and Regulations. 12. Rules of Drill, Exercise, and Manœuvring. 13. Calligraphy. 14. Elements of Descriptive Geometry. 15. Gymnastics, Fencing, Swimming.

After the close of the third year, the scholars enter the Corps of Pioneers, under the various conditions already described. Scholars who specially distinguish themselves will at the close of the second year be received, free of cost, as Attendant Pupils (*frequentanten*) in the Academy of Engineers; and after completing the four years' course there, be distributed as Officers in the Corps of Pioneers.

The number of scholars in the Flotilla School Company is 60; and the course of instruction three years in length. The subjects are—

1. Religious Knowledge. 2. Italian. 3. Austrian History and Geography. 4. Arithmetic and Algebra. 5. Geometry, Plane Trigonometry, Practical Mensuration. 6. Popular Mechanics. 7. Military Correspondence, and Management of the Internal Affairs of a Company. 8, 9, 10. Flotilla Navigation, Artillery, and Pioneering. 11. Rules and Regulations. 12. Rules of Drill, Exercise, and Manœuvring. 13. Calligraphy. 14. Military Drawing. 15. Elements of Descriptive Geometry. 16. Gymnastics, Fencing, Swimming, and Boating.

The most distinguished scholars are sent, free of charge, at the end of the second year, to the Artillery Academy, and after completing the four years there, enter the Flotilla Corps as Officers. The others leave at the end of three years under conditions similar to those already described.

The Marine School Company contains 150 pupils, and its course of instruction lasts four years.

The subjects are—

1. Religious Knowledge. 2. German. 3. Italian. 4. Illyrian. 5. Natural History. 6. Geography and History. 7. Arithmetic. 8. Algebra. 9. Geometry and Plane Trigonometry. 10. Popular Mechanics. 11. Military Correspondence and Management of the Affairs of a Company. 12. Artillery, Arms, and Munitions. 13. Rules and Regulations, by Land and Sea. 14. Rules of Drill, Exercise, and Manœuvring. 15. Calligraphy. 16. Common Drawing and Machine Drawing. 17. Military Drawing. 18. Gymnastics, Fencing, Swimming.

The pupils will also be thoroughly exercised in boat manœuvring,

* Pontooning being included in the duties of the Pioneers.

in the use of sails, and of cannons, and after the end of each year's examination, will pass some weeks on board a sailing vessel for practice.

Pupils who either through want of capacity or of diligence fall behind in the theoretical instruction, will at the end of the second year be sent on board ship as ship's boys (*Schiffs-junge.*)

The other scholars go through the courses of the third and fourth year, and then pass, on the same plan as in the Infantry School Companies, into the Marine Infantry, or as Marine Artillerymen or as Engineering pupils* of the first class, into the Navy, or into the Arsenal Works Company, to devote themselves to Naval Architecture.

The best scholars enter after four years instruction as Attendant Pupils in the Artillery Academy, and after completing their time there are admitted as Second Lieutenants of the second class into the Marine Artillery.

B. SCHOOLS FOR OFFICERS.

1. *The Cadet Institutions.*

The object of these is to prepare pupils for the instruction in military science given in the Academies.

They are four in number, with 200 pupils in each.

They contain military or treasury places, either wholly or half gratuitous; places on provincial and private foundations; and finally places for paying pupils.

The exact number of places open to pupils on provincial and private foundations, and to paying pupils, can not be determined, as in this respect the Cadet Schools form a single whole with the Academies, and the amount can only be fixed as a total for these institutions taken together. There are altogether 1,100 of these military places, which may be distributed in varying proportions amongst the Cadet Schools and the Academies; the number in any one of them can not be stated as a rule.

The military foundations are reserved for the sons of Officers serving or having served with the sword; the entirely gratuitous places for the sons of Officers in want, and the half gratuitous places for those of Officers provided with means of their own, or serving in higher positions.

Officers employed in the Outfit Department, Remounting† De-

* The Marine Infantry do not serve like our Marines on board ship, but only on the coast. The Marine Artillery and the Engineering pupils (*Maschinen-lehrlinge*) serve on board.

† For the Outfit Department (*Monturs Commission,*) see a previous Note. The business

partment, the Department of Military Law and Jurisdiction* are thus excluded, unless they have previously served with the sword. But for the sons of these Officers, of the Military Judges, the Military Surgeons, and other Officials, having attained the eleventh or any higher allowance class,† there will be reserved eight entirely and eight half gratuitous places in the Cadet Schools and the Academies.

Appointments to the military and provincial foundations are granted by His Majesty, the former on the recommendation of the Supreme War Department, the latter on that of the Minister of the Interior. Among the former are included, as already stated, the most distinguished pupils of the Lower Houses of Education, for whose transfer to the Cadet Schools the rules are laid down, the recommendation being annually submitted for His Majesty's approval.

Special regard will be given to candidates whose fathers have been killed or invalided in the field; after these, to those who are orphans on both sides; to the sons of Officers of special merit, of Officers with large families, and the like.

Appointments upon provincial and private foundations, or as paying pupils, will be made in the manner already stated in the general account of the Educational Institutions.

The age of admission is the eleventh year completed, and twelfth year not exceeded, and the candidate will be expected to know the subject of instruction prescribed for the third class of the common (*normal*) schools.

A knowledge of German, however, will not be considered indispensable. Pupils who are not Germans will receive in the first half year of the first course special instruction in German.

The instruction continues during four yearly courses. The command is held by a Field Officer, assisted by—

1 Subaltern Officer as Adjutant.
2 Captains.
10 Subaltern Officers.
2 Ecclesiastical Professors.
1 Accountant.

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of the Remounting Department or Remounting Establishments (*Remontirungs Anstalten*) is to supply the cavalry with horses. There are several of these great establishments for buying and breeding horses; the largest of all is in Gallicia.

* *Auditoriat.*—There is an *Auditor* or Military Judge in each regiment. He has passed through his course as a law student, and declared for this branch. In every province there is a central department. These law officials rise through all the grades from Lieutenant up to General.

† One of the marks of superior rank is the amount granted for *allowances*, for which there is a carefully graduated scale.

1 Army Surgeon.
1 Surgeon's Assistant.
12 Sergeants for Inspection.
4 Orderlies, together with the requisite number of mechanics and servants.

The subjects of instruction are—

1. Religious Knowledge. 2. German Language and Art of Speaking. 3. French. 4. Natural History. 5. Geography. 6. History. 7. Arithmetic. 8. Algebra. 9. Geometry and Plane Trigonometry. 10. Rules of Drill and Exercise. 11. Calligraphy. 12. Common Drawing. 13. Gymnastics, Single-stick, Swimming.

Those pupils who satisfactorily complete their four years' course are transferred, according to their capacities, and as far as possible, to their own wishes, into one of the Military Academies. Entrance into the Marine Academy takes place at the close of the second year.

Pupils who do ill, will, at the close of any one of the three first years, be removed into the course of the following year at one of the Upper Houses of Education; or, at the close of the fourth year, into one of the Infantry School Companies.

This removal, in the case of paying pupils, will be dependent on the consent of the parents; failing which, they will be sent back home.

2. *The Military Academies.*

The object in these is to educate Officers in the higher military subjects for the different arms of the service.

There are four Academies; the Neustadt Academy, the Artillery Academy, the Engineers' Academy, and the Marine Academy.

The scholars in each are divided into four yearly courses of nearly equal numbers. In the Neustadt Academy each year is sub-divided into two parallel classes, the instruction being the same in both.

The pupils in the Military Academies are of the different kinds described in the account of the Cadet Houses, and the appointments similarly made; the Academies and the Cadet Houses in these respects forming a single body.

Candidates for admission into the Neustadt Academy, the Artillery Academy, or the Engineers' Academy, must be nearly, if not quite, fifteen, and not above sixteen years old. For admission into the Marine Academy, they must be nearly, if not quite, thirteen, not above fourteen years old.

The Academies receive their pupils in the first instance from the Cadet Schools, after the satisfactory completion of the fourth (or, in the case of the Marine Academy, the second) year, and then, as

already stated under the head of the School Companies, from the Artillery School Companies, and from the Engineer, Pioneer, Flotilla, and Marine School Companies, after the highly satisfactory completion of the second (or, in the Marine School, of the fourth) year.

Pupils from these School Companies, before entering the Academies, will take the Military Oath, receive the rank of Lance-Corporals, and be admitted free of charge as Attendant Pupils into the Academies, to receive their education for the rank of Officer. Scholars from the general body of soldiers, who are attending the School Companies, are to be treated, in respect of their transfer to the Academies, in the same way as the other pupils.*

Entrance into the Academies is confined to the commencement of the first year.† Pupils admitted from places of private instruction are examined in the subjects taught in the Cadet Schools; those who wish to enter the Neustadt, the Artillery or Engineers' Academy, in the following subjects, to the extent here described:—

1. German:—The Art of Speaking; Prosody; the Rules of Speaking; the various Rhetorical Styles.
2. Natural History:—General knowledge of the Three Kingdoms.
3. French:—General grammatical rules; Translation from German into French.
4. Geography.
5. History:—Ancient and of the Middle Ages.
5. Geometry and Rectilinear Trigonometry, with the Application of Algebra, and the Solution of Geometrical Problems.
7. Common Drawing.

Candidates for the Marine Academy will be required to know,—

1. The German Grammar, including Syntax.
2. Zoölogy.
3. French:—The Auxiliary Verbs; the Four Conjugations; Reading.
4. General Geography.
5. Ancient History.
6. Arithmetic and Algebra as far (inclusively) as Equations of the First Degree, with two unknown Quantities.
7. Common Drawing.

Candidates from both institutions must also possess the degree of religious knowledge corresponding to their age, and must write a good current hand.

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* In the School Companies there are two different sets of Scholars, those who have come from the Houses of Education or from private schools, and those who *attend* after two years' service in the Army. These are *frequentanten* in the School Companies, but all alike, who come from the School Companies, are *frequentanten* in the Academies.

† It appears, however, that a transfer of pupils, for example, from the Engineers' Academy to Wiener Neustadt, in consequence of incapacity for Mathematics, is allowed at a later standing. After passing a year at Znaim, a young man may enter the second year's course at Neustadt.

Pupils who are found negligent in the course of their academical studies, will at the close of the first, second, or third year be transferred to the classes corresponding to their age in the School Companies, or will be enlisted in the Army as Cadets if they possess the requisite bodily qualifications, in the manner already described.*

The Neustadt Academy.

Wiener Neustadt having been the seat of this Academy for more than a century, the ancient name thence derived will be retained in its usual acceptation, though the Academies for the Artillery and the Engineers will also be placed in the same locality. The institution counts 400 pupils, designed primarily for the Infantry of the Line and of the Frontier, and secondly, for the Chasseurs and the Cavalry.

The Director of the Academy is a Colonel or General, attached to whom, for purposes of instruction, discipline, and general management, there are three field and thirty-four other Officers; for religious care and instruction, four Ecclesiastics; for medical attention, one Regimental Surgeon, one Army Surgeon, and one Surgeon's Assistant; for the accounts, one Accountant, and four Accountant's Assistants. The large number of pupils maintained in the institution requires, moreover, a proportionately large staff for superintendence, a numerous body of attendants, servants, and the like; so that the whole number to be added to that of the pupils does not fall short of 309 persons; 64 horses are allowed for the riding lessons.

The plan of study is based on that of the Cadet Schools, and embraces the following subjects:—

1. Religious Knowledge. 2. French. 3. Italian. 4. Bohemian. 5. Hungarian. 6. Logic and Psychology. 7. Geography. 8. History. 9. Analytical Geometry and Higher Analytical Mathematics. 10. Mechanics, Spherical Trigonometry, Mathematical Geography, Triangulation. 11. Natural Philosophy, Elements of Chemistry. 12. Practical Mensuration, taking Maps at Sight. 13. Descriptive Geometry. 14. Military Composition. 15. Positive International Law,† Austrian Civil Law (*Privat Recht.*) 16. Military Penal Law and Procedure. 17. Pioneer Service, with Field Fortification. 18. Permanent Fortification. 19. Civil Architecture. 20. Arms and Munitions. 21. Study of Ground and Positions, and Military Drawing. 22. Rules and Regulations, and Military Administration. 23. Rules of Infantry Drill and Exercise. 24. Rules of Cavalry Drill and Exercise. 25. Manœuvring. 26. Riding. 27. Gymnastics. 28. Fencing. 29. Dancing. 30. Swimming.

Pupils who show a talent for general drawing will be practiced in it.

* The wishes of the parents are, of course, consulted in the case of paying pupils, but it is said that their consent is very generally given.

† The Law of Nations as it exists *de facto* without consideration of its principles.

After the completion of the fourth year's course, the pupils will be recommended by the Supreme War Department to His Majesty for nomination as Second Lieutenants of the second class.

In their distribution into the various regiments, &c., of the army, the choice of the pupils will, as far as possible, be considered.

The pupils upon leaving will be, without exception, fully equipped at the expense of the State. Only in the case of the pupils who wish to enter the Cavalry, the parents (or guardians) will be called upon to give security for the payment of 1,000 florins (100*l.*) towards the expenses of the first equipment, and for a monthly allowance of 25 florins (2*l.* 10*s.*)

3. *The Artillery and Engineers' Academy.*

The arrangements of these two Academies are in many respects similar, as required by the character of the two kindred sciences for which they are founded.

The number of scholars is fixed at 160 pupils, and 40 attendant pupils (*Frequentanten*) in each.

The command in each is intrusted to a General or a Colonel.

For the smaller number of scholars, fewer instructors, superintendents, and attendants are needed; the complete amount in each Academy is fixed at 200 men, in addition to the scholars. Each has thirty-two horses allowed to it.

The plan of instruction is in many respects identical in each.

The subjects taught in both are—

1. Religious Knowledge. 2. French. 3. Italian.* 4. Logic and Psychology. 5. Geography. 6. History. 7. Analytical Geometry and Higher Analytical Mathematics. 8. Descriptive Geometry. 9. Mechanics and the Elements of the Study of Machinery. 10. Mathematical Geography. 11. Natural Philosophy and Chemistry. 12. Practical Mensuration, taking Plans at Sight. 13. Military Composition. 14. International Law; Austrian Civil Law. 15. Military Penal Law and Penal Procedure. 16. Military Drawing; Study of Ground and Positions. 17. Rules and Regulations, and Military Administration. 18. Riding. 19. Gymnastics. 20. Fencing. 21. Dancing. 22. Swimming.

Common drawing will be treated, as it is at the Neustadt Academy, as an optional subject.

In the Artillery Academy the following additional subjects will be taught;—

1. Bohemian.† 2. Field Fortification and Permanent Fortification. 3. Tactics of the Three Arms. 4. Artillery. 5. Sieges, Construction of Batteries; Artillery. 6. Rockets. 7. Rules of Drill and Exercise in the Artillery and

* This is at present, in point of fact, omitted for want of time.

† The Artillery is recruited very largely from Bohemia and Moravia. A knowledge of the Bohemian language (which is pretty nearly the same as Moravian) is therefore essential for an Officer in the command of Artillerymen.

Infantry. 8. Instruction in shoeing horses, in judging of their Age, in judging of them at Sight, in Bridling, Saddling, and Grooming.

In the Academy of the Engineers the additional subjects are—

1. Arms and Munitions and Artillery. 2. Art of Fortification. 3, 4. Civil Architecture, Plain and Ornamental. 5. Pioneer Service. 6. Rules of Drill, Exercise, and Manœuvring.

The pupils of the two Academies enter in the same way as those at Neustadt, after the satisfactory completion of four years' instruction, with the rank of Second Lieutenant of the Second Class, the respective services of the Artillery, and of the Engineers or Pioneers. Pupils for whom no vacancies can be found enter the Infantry.

4. *The Marine Academy.*

This, like the other Academies, is in the charge of a Field Officer, or a General.

The pupils are 100 in number; the Teachers, other Officers, and attendants, 88.

One essential distinction here (explained by the necessity of habituating the pupils to the sea) is the admission at an age earlier by two years, and the proportionally earlier termination of the course.

The plan of instruction combines a continuation of the studies prescribed in the Cadet Schools, with the commencement of those specially required for the marine service, viz.:—

1. Religious Knowledge. 2. German. 3. Italian. 4. French. 5. English. 6. Geography. 7. History. 8. Algebra. 9. Geometry and Plane Trigonometry. 10. Analytical Geometry and Higher Analytical Mathematics. 11. Spherical Trigonometry and Nautical Astronomy. 12. Mechanics and Natural Philosophy. 13. Descriptive Geometry. 14. Navigation. 15. Military Composition. 16. International Law, Austrian Civil Law, Sea Law. 17. Military Penal Law, and Penal Procedure. 18. Artillery. 19. Fortification, Attack and Defense of Coast Fortifications. 20. Naval Tactics and Naval History. 21. Knowledge of Rigging, &c. (*Takelungslehre.*) 22. Naval Manœuvres. 23. Naval Architecture. 24. Signals. 25. Rules and Regulations. 26. Rules of Drill and Exercise. 27. Calligraphy. 28. Military Drawing. 29. Common Drawing. 30. Swimming. 31. Gymnastics. 32. Fencing. 33. Dancing.

In addition to the practical instruction given in the course of the school year, the pupils of the three first years will in the months of August and September be sent in sailing vessels on a voyage for practice.

The pupils at the end of four years enter as Cadets into the Navy, the Flotilla Corps, or the Corps of Naval Architecture.

After completing a practical course of two years, they will receive their promotion as Second Lieutenants of the second class.*

C. SPECIAL SCHOOLS.

1. *The Military Teachers' School.*

The object here is a double one; first, to bring up good and serviceable teachers in the subjects of study prescribed for the Military Houses of Education; secondly to provide at the same time instructors in gymnastics and fencing for all the military schools and for the troops. The institution accordingly consists of two departments, each of thirty Attendant Pupils, receiving instruction in these two different branches.

Non-commissioned Officers are admitted after a service of at least two years. Candidates for admission into the Teachers' department must, in addition, possess the required amount of knowledge in the subjects taught in the Military Houses of Education; and, as a rule, must know, besides German, one other of the Austrian national languages. Proficiency in every one of the subjects will not be considered essential. Candidates for admission to the Gymnastic and Fencing Department will be required to show a certain amount of readiness in the use of arms and in gymnastic exercises, and an evident capacity for acquiring greater skill.

Registration for admission is to be obtained in the usual course of the service from the Supreme War Department.

The Attendant Pupils receive, in addition to their ordinary pay, bread and the extra allowance; and for their better subsistence also an allowance corresponding to that granted for provision during a march.

The command is held by a Field Officer or Captain; six Subaltern Officers and four Sergeants act as teachers, the latter as assistants in the instruction in fencing and gymnastics, and as swimming master. The instructor in the art and methods of teaching may be a civilian.

The subjects of instruction in the Teachers' Department are—

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* Literally, "as *Frigate-Ensign*, or Second Lieutenant of the second class," the former being in rank the same as the latter. The order of rank is,—

Captain	of a Man-of-War	equal to a	Colonel in the Army.
"	of a Frigate	"	Lieutenant Colonel ditto.
"	of a Corvette	"	Major ditto.
Lieutenant	of a Man-of-War	"	First Captain ditto.
"	of a Frigate	"	Second Captain ditto.
Ensign	in a Man-of-War	"	First Lieutenant ditto.
"	in a Frigate	"	Second Lieutenant ditto.

In the Corps of Naval Architecture the ordinary military titles are used.

1. The Art and Methods of Teaching. 2. German. 3. Another Austrian Language. 4. Arithmetic and Geometry. 5. Geography. 6. Military Composition, and the Management of the Internal Affairs of a Company. 7. Calligraphy. 8. Common and Military Drawing. 9. Gymnastics, Fencing, and Swimming.

In the Gymnastic Department,—

1. Staff, Rapier, Sword, and Bayonet Fencing. 2. Gymnastics and Swimming. 3. Knowledge of Fire-arms.

In both Departments a certain number of hours weekly will be devoted to Military Exercise.

Instruction in all the subjects will be given with special reference to the methods to be pursued in teaching them in the various Military Schools.

The course in each Department lasts one year. Under certain circumstances particular pupils in the Teachers' Department may remain for the further completion of their studies a second year in the institution.

In the Teachers' Department, pupils who show no aptitude or liking for some particular subject, may be exempted from attending the lessons given in it, so as to allow them to give more thorough attention to other branches.

After passing the examination, the pupils are either sent immediately to undertake duty in the Military Schools, or return to their service in the troops, and pass, as occasion requires, into the Military Schools. Corporals who distinguish themselves by remarkably good progress will be promoted to the rank of Sergeant.

2. *The United Higher Course for the Artillery and Engineers,*

Has for its object the more advanced instruction of young Officers in a scientific and technical point of view, for service in the Artillery and Engineers.

Twenty Officers, of more than usual capacity, between twenty-one and twenty-six years of age, will be admitted from each of the two arms. They must be unmarried, and must have served with distinction during a period of not less than two years.

Officers in whose cases these conditions are satisfied, and who desire to be admitted to the course, apply for registration for admission to the examination, in the ordinary form, to the War Department.

Officers who, in the month of October, are summoned to attend, may charge their traveling expenses to the Treasury, and undergo an examination before the Professors attached to the Course, in the following subjects:—

1. Analytical Geometry and Higher Analytical Mathematics. 2. Mechanics and the Elements of the Study of Machinery. 3. Natural Philosophy and Chemistry. 4. Military Composition. 5. French. 6. Military Drawing, tested by the production of a Drawing of their own doing.

Candidates for the Artillery will be, moreover, examined in the Tactics of the three Arms, and in Artillery; and those from the Engineers, in the Art of Fortification and in Civil Architecture, both Plain and Ornamental.

The text-books used in the Academies of the Artillery and Engineers will serve as a measure for the range of attainment required. Pupils who passed with distinction through these Academies will thus be specially fitted for admission into the Higher Course after they have proved, during their time of service, their diligence in bringing the knowledge they have acquired into actual application.

On the close of this preliminary examination, the results will be submitted to the Supreme War Department, and the recommendations for admission laid before His Majesty.

A superior Field Officer, either of the Artillery or the Engineers, will be intrusted with the charge of the united course. The lectures will be given by the Professors of the Academy of the Artillery and Engineers. From the nature of the duties, partly common and partly distinct, which devolve upon the two corps, it follows that the course of the studies (which will be carried on during two years) will in like manner be partly common and partly separate.

The subjects of common instruction will be—

1. Mechanics in application to Machinery, combined with Machine Drawing. 2. Natural Philosophy and Chemistry, combined with practice in manipulation, in making experiments, and in analyzing. 3. Theory of Artillery, in reference to the constructions that occur in Artillery. 4. Higher Tactics. 5. Principles of Strategy, illustrated by the representation of campaigns, with special attention to the use of Artillery, as well in Attack and Defense of fortified places, as in the field.

Separate instruction will be given to Artillery Officers in—

1. Service in Workshops, Depôts, and Arsenals. 2. Knowledge of Foreign Artillery, of the requisites (*ausrüstungen*) for Field service and Sieges, and for furnishing fortified places.

To Engineer Officers, in—

1. Ornamental Architecture, combined with Architectural Drawing. 2. The Art of Fortification, special attention being given to working out projects.

The pupils receive in addition practical guidance and supervision in all subjects of a scientific nature connected with the Art of War.

The pupils of the second year undergo an examination in October. Upon the results of the examination the War Department decides on their promotion for the rank of Second to that of First Lieutenants.

3. *The War or Staff School.*

The object of the War School is to give Officers of all arms an education for higher duties, especially for those of the Staff and of the Upper Adjutant Department.*

Any Subaltern Officer of the active army, without distinction of arms, may claim admission into the War School, provided he is above twenty-one and under twenty-six years old, is unmarried, and has served as Officer uninterruptedly and with distinction two years at least with the troops, and, provided, finally, he has passed the prescribed preliminary examination.

For admission to the examination, registration, to be obtained in the usual form from the War Department, is requisite.

The examination is conducted between October 10th and 20th, in the War School buildings; the registered candidates will be summoned to Vienna at the beginning of October; traveling expenses will be paid by the Treasury. The subjects are—

1. Algebra and Geometry, including Plane and Spherical Trigonometry. 2. Geography. 3. History. 4. Arms and Munitions. 5. Field and Permanent Fortification. 6. Pioneer Service. 7. Rules of Drill and Exercise (in detail, for the arm in which the candidate has served, and generally for the other arms.) 8. Manœuvring. 9. Military drawing, tested by the production of a drawing of the candidate's own doing. 10. Military Composition, tested by working out an exercise in the presence of the Commission. 11. French. And finally, 12, the candidate must be able to speak one of the national languages of the Austrian Empire, Slavonic, Hungarian, or Italian, and must write a good current and legible hand.

The amount of knowledge required in these subjects will be regulated by the range of the text-books prescribed for use in the Academy at Neustadt. Regard, however, will not so much be given to the minutiæ of knowledge possessed by the candidate, but rather to the evidence of his having a correct judgment and quick apprehension, and the power of expressing himself both orally and in writing.

Upon the results of the examination, formally drawn up by the authorities of the school, recommendations for admission will be submitted to the sanction of His Majesty.

The number of attendants in the War School is fixed at thirty, and the length of course is two years.

* The Higher *Adjutantur* or the Aide-de-Camp Department.

The attending pupils receive, in addition to their ordinary pay, a monthly allowance of twenty florins, rations, and allowance for two horses; when employed in taking surveys and reconnoitring, they have an extra allowance of thirty florins monthly.

The War School is commanded by a General or Superior Field Officer.

Five Field Officers or Captains, taken as a rule from the Staff, give lectures on the prescribed scientific subjects. One Field Officer or Captain of Cavalry takes the duty of riding-master; and one civil Professor that of instruction in the French language and literature. Necessary officers, attendants, and servants take the duty of adjutants, of the internal management, of the service, and of attending to the thirty horses.

The first year's subjects of instruction are—

1. Military Drawing and the study of Ground and Positions. 2. Higher Tactics. 3. Staff and Superior Adjutant Duty. 4. French Language and Literature. 5. Riding.

Those of the second year,—

1. Military Drawing, Ground and Positions. 2. Military Geography. 3. Principles of Strategy, illustrated by representations of some of the most instructive campaigns. 4. French Language and Literature. 5. Riding.

The course begins on the 1st of November, and lasts to the end of September.

The Attendants at the War School must be practiced in those arms in which they have not served. They are for this purpose distributed into the various bodies of troops forming the garrison of Vienna, go through the exercises and manœuvres of these troops—in the first year with one, and in the second with the other arm. At the termination of these periods of practice, they will be called upon to undertake the command of a Battery, of a Squadron of Cavalry, and of a Division of Infantry.

In the month of May, the attendant pupils of the first year will go out upon a course of practical surveying; those of the second year will be similarly employed in reconnoitring, choosing sites for encampment, discovering, judging of, and describing proper points for taking up positions, forming *têtes-de-pont*, entrenched camps, and the like, and in performing other duties falling within the service of the Staff.

At the beginning of October, the pupils of the second year will undergo an examination, which will be conducted both orally and by papers.

Upon the results of this the Supreme War Department will determine upon their promotion to the rank of First Lieutenants (if they are not already of that rank,) and this without any reference to their previous position, their position henceforth being simply determined by their merit.

The same grounds determine the cases of those who are admitted to the Staff, or who return to their respective arms.

Those who, after a satisfactory completion of the course, return to service with the troops, will, after three years' meritorious service, be specially recommended for extraordinary promotion.

Control of the Institutions.

The Upper and Lower Houses of Education, the Infantry School Companies, the Cavalry School Squadrons, and the Frontier School Companies, are under the orders of the Commanders of the Army, the Army Corps, or the military government in whose district they are situated. The Artillery and Engineer School Companies are under the orders of the General Artillery and Engineer Departments; the Pioneer and Flotilla School Companies, under those of the Quartermaster-General's Department; the Marine School Company, under those of the Admiralty. Which functionaries, however, receive from the Supreme War Department all directions relating to organization and instruction.

The Cadet Schools, the Academies, the Military Teachers' School, the Upper Artillery and Engineer Course, and the War School, are immediately under the orders of the Supreme War Department.

The general organization of all the military schools and places of instruction is once for all established by the regulations sanctioned by His Majesty. These regulations contain all that concerns the physical, moral, and intellectual training of the pupils, and all have the one object of rearing them up as worthy members of the Austrian army, and faithful supporters of the throne and of the honor of their country.

III. REMARKS ON THE AUSTRIAN MILITARY EDUCATION.

The English Commissioners in their General "*Report on the Education and Training of Officers for the Scientific Corps*" hold the following language:—

The magnitude of the Military Education of Austria entitles it to rank among the chief Institutions of the Empire. It has been remodeled since the wars of 1848, 1849. It is now centralized, and wholly directed by one of the four Co-ordinate Sections of the War

Office, which is independent of the others, and reports directly to the Emperor. This Educational or "Fourth" Section has the control of between 300,000*l.* and 400,000*l.* yearly. It provides for the free or nearly free education of more than 5,000 pupils. The extent and completeness of the system will be best understood by a reference to the clear and valuable official account of the schools.*

The military schools are divided by this document into (1) those which educate pupils for *Non-commissioned Officers*, (2) those which educate for *Officers*, (3) and those *Senior Schools* which complete the education and extend the instruction of both classes. The method of training Non-commissioned Officers is a peculiar and remarkable part of the system.

1. No less than 5,730 pupils are in process of being educated for Non-commissioned Officers. They are received into a Military School at seven years old, and at that early age are devoted to the army, with a kind of solemnity, by their fathers, somewhat similar to the practice at Woolwich Academy:—"I hereby pledge myself to surrender up my son to the Imperial Military Service, in case of his being admitted into a Military Educational Institution, and I will under no pretext require his return." This promise, as the official document states, may no doubt be recalled if the youth finds that he has mistaken his vocation; but it must exercise great influence (and such is its avowed object) in retaining him in it.

After passing successively through two Junior Institutions,—the Lower Houses of Education, where he continues till eleven years old, and the Upper Houses, where he remains till fifteen,—the boy receives his finishing course in one of what are termed the School Companies, the highest class of schools for training boys to become Non-commissioned Officers in all arms of the service. These are twenty in number, and scattered over the whole Empire, containing generally 120 pupils each, though in one case only sixty; and with a course of either two or three years, according to the nature of the service. The extent and the requirements of the Empire give a striking variety to their character. Thus, in the frontier School Companies, "the range of the studies is more extensive, because the Non-commissioned Officers on the Military Frontiers are intrusted with the general administration, and require of necessity a knowledge of Political Administration, of Jurisprudence, and Agriculture;" and thus also the Non-commissioned Officers for the responsible Flotilla Service of the mouths of the great rivers, the lagoons of the Po, the head of the Adriatic, and the lakes, are carefully

* See *Ante*, p. 412—441.

educated and frequently promoted. Following the course of a pupil through these Upper Houses and School Companies, we were much struck by the sensible and vigorous character of the education, and the motives supplied for exertion. In the Upper Houses the boys compete for entrance to the School Companies which they prefer, and the more scientific companies are a special object of ambition, because it is more usual in these for young men to be raised by their talents to the Academies, and thus made Officers, "free of all cost:" according to the regulations, however, this is possible in all. It may be stated that from six to ten pupils from each of the more scientific School Companies,—the Artillery, Engineer, Pioneer, Flotilla, and Marine Companies,—are yearly transferred to the Academies, to complete their education there for the Officer's Commission.

A system of this kind, supplying at once a good education and large opportunities of advancement, must necessarily operate as a great encouragement to young men educating for Non-commissioned Officers; and allowing for the social differences of the two countries, it resembles in spirit the French system, which throws open the gates of the Polytechnic and St. Cyr, and with them a proportion of the Commissions in the Army, to all.

This, however, is not all. The sums devoted to the education of Non-commissioned Officers, as well as Officers, are immense, and may be regarded as a spontaneous contribution of the National Feeling, no less than a State provision. A system both of public and private foundations (*Stiftungen*) prevails—part derived from the Emperor, part from the provinces, part from private gifts and legacies—by which 3,190 pupils are supported in the Houses of Education and the School Companies, and 1,320 in the Cadet Schools and Academies. The very large majority of these exhibitions supply a *complete*, about 200 a *partial*, maintenance. And it is curious to observe the aid to education which is so common in our own Universities, devoted in Austria to what may be termed the great National Institution—the Army,—and retaining all the limitations to the descendants of Founders or Natives of provinces which marked our own foundations. Some of these exhibitions have been founded by foreign soldiers for their own countrymen. Thus there are two bearing the name of the O'Gara and the O'Brady, to be held by any Irishmen of good family, one of which is in the gift of the Roman Catholic Archbishop of Dublin. We should add that this system is still a living and popular one. Within three years the city of Brünn has founded such an exhibition "for sons of Austrian subjects in Moravia, and by preference in Brünn, in

commemoration of His Majesty's escape from assassination in 1853." We ourselves heard a distinguished Officer express an intention of founding one of these Exhibitions. The comparison with the open *Bourses* of the Polytechnic is remarkable; but the Austrian appointments to free places seem to be given, like the Prussian, solely as rewards for the service of the parent.

2. The education of young men for Officers is conducted upon the same principles which regulate that for Non-commissioned Officers. The age of admission to a Cadet School is about eleven. The pupils are pledged to the service with the same formalities which we have noticed in the Lower Houses of Education. Between fifteen and sixteen they enter one of the Academies for the Line, the Artillery, the Engineers, or the Marine, and after four years they pass to their respective services.

Thus, unlike the French system, that which is followed in Austria commits the pupil to the Army, and to a Military Education, from an early age, resembling herein the plan of the *Accademia Militare* of Turin. But an attempt seems to be made to combine general with special teaching. Thus, although even in the two first years (from fifteen to seventeen,) at Wiener Neustadt, there is some introduction of successful practical military teaching, the chief weight is thrown upon mathematics, history, geography, drawing, and French; special military teaching has a greater, though far from an exclusive place, in the two last years. The studies are high, and (as far as we could judge) pursued carefully, and with excellent discipline.

The description we have given of the system pursued in the Schools for Non-commissioned Officers will have shown that there is a constant appeal to emulation. The same is found at Wiener Neustadt. There is a careful system of assigning credits during the whole school period, which itself argues competition. The chief immediate reward, indeed, is the choice of a regiment on leaving the school; but the prospect of entering the Staff School stands in no distant perspective, and this is filled with so many pupils from Wiener Neustadt, that it must be looked upon as the sure reward of a successful Neustädter. There are other inducements of a different character. The discipline being strict, pupils are constantly removed from Wiener Neustadt and the other Academies to the schools for Non-commissioned Officers, and though sometimes allowed to enter the army as Officers, it must always be as juniors to their contemporaries at Wiener Neustadt. We heard instances of great strictness in this matter.

The new course for the Special Arms in Austria is not yet com-

pletely in operation. It is at present carried on separately in the Academy of Olmütz for the Artillery, and that of Znaim, in Moravia, for the Engineers. There are 200 pupils in each Academy, and the courses of instruction, which are more special or technical than at Wiener Neustadt, last four years, from the age of fifteen to nineteen. The yearly examinations, the manner in which the marks of the monthly examinations tell on the final one, and the careful classification of the pupils in the order of merit, reminded us of the system of the Polytechnic more than any other school we have seen. And an inspection of the very high credits obtained by the first thirty pupils will prove the diligence with which the studies are pursued. We should add that several pupils of marked talents come from the scientific School Companies. A further fact bears witness to the vigor of the discipline. We have alluded to the dismissal of unpromising subjects from the Austrian Military Schools. In the course of three years, since the changes of 1850, it appears that nearly 100 pupils were removed from Znaim, as not coming up to the standard required for the Engineers by the new regulations.

3. The courses of instruction in the three Academies for Infantry and Cavalry, Artillery, and for Engineers, last for the same time, and run (as it were) parallel to each other. Each is, or is to be, completed by a senior department. The United Course for the Artillery and Engineers is not indeed yet combined in the magnificent buildings begun at Wiener Neustadt; but it is already organized in a provisional state at Znaim for the Engineers, and the plan of instruction drawn up is a solid one. The arrangements for the general Staff School require more remark.

In our report upon Austrian schools we have specially noticed this School as remarkable for its thorough and open competitive character from first to last, and its very sensible plan of study. Admission to it is by competition, open to Officers of all arms: the pupils are not unduly overburdened with work; perhaps, there is even room for one or two more subjects of importance; but what is done seems to be done thoroughly; the Officers are carefully ranked, on leaving the School, according as the abilities they have displayed, may be considered a criterion of their fitness for employment on the General Staff; and *in this order* they enter the Staff Corps. The consequence is that every Officer knows distinctly, from the time that he first competes for admission until his final examination on leaving, that the order in which he will enter the Staff depends entirely on his own exertions and success at the school. It seemed

to us that this open competition produced a spirit of confidence and energy in the students, as great, if not greater, than any we met with elsewhere.

The whole of the above system of education is directed by the Fourth Section of the War Department. In all the schools we found traces of its activity; and the energy and system which prevail in the Military Teaching of Austria appear in great measure to result from its being directed by this single head.

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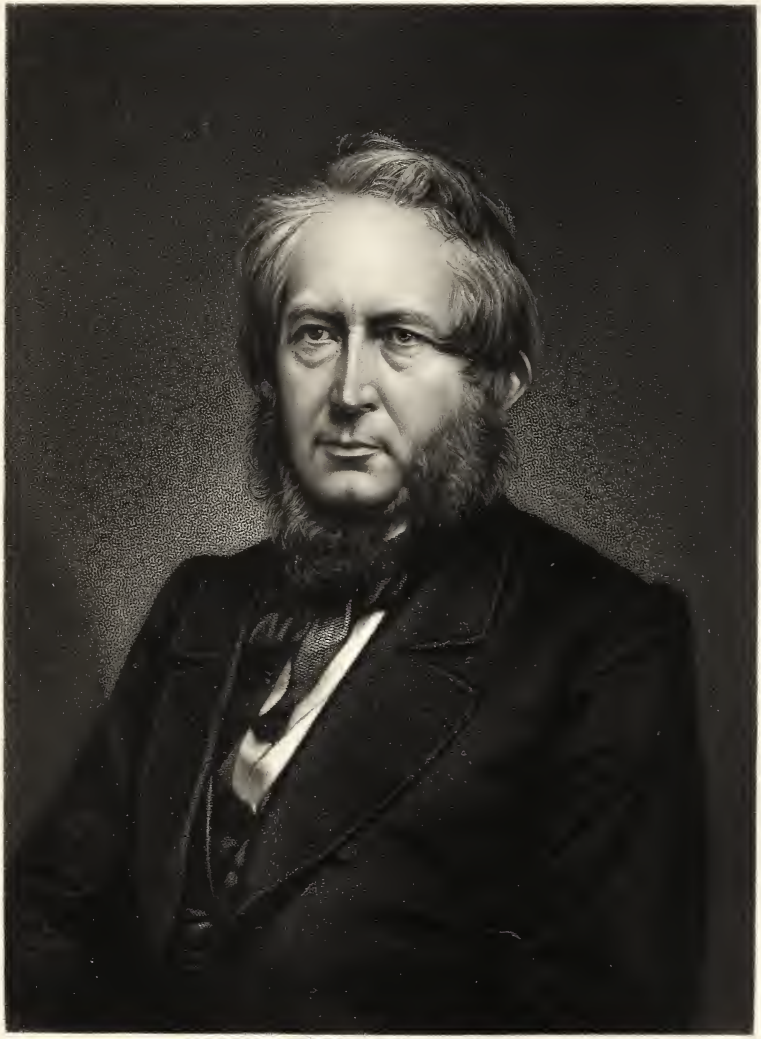
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Engd for Geo E. Perine, N.Y.

HENRY P. TAPPAN, D.D., L.L.D.

PRESIDENT OF THE UNIVERSITY OF MICHIGAN

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I. HENRY P. TAPPAN.

Henry P. Tappan, D. D., LL. D., under whose auspices as its first President, the State University of Michigan, rose from an insignificant college into one of the first class universities of the country, was born at Rhinebeck, in the State of New York, on the 23rd of April, 1805. His family were among the earliest settlers on the North River, more particularly in Ulster county. His early studies were pursued partly at home, and partly at Greenfield Academy. In 1822, he entered the Sophomore Class at Union College, where he graduated in 1825. He went to the Theological Seminary at Auburn in the same year, graduated there in 1827, and first entered upon the ministry as Assistant to the Rev. Dr. Van Vechten, in the Reformed Dutch Church at Schenectady. In 1828, he was settled as pastor over the Congregational Church at Pittsfield, Mass., but was obliged to leave there in 1831, on account of ill health. He went to the West Indies for a time, and on his return in 1832, was appointed Professor of Moral and Intellectual Philosophy in the University of the city of New York. He continued there until 1838, when he left together with the rest of the Faculty, owing to difficulties in the administration of the institution. For several years previous he devoted himself to the composition of works on philosophy and education, and to the management of a private seminary in the city of New York. In 1839, he published a "*Review of Edward's Inquiry into the Freedom of the Will;*" in 1840, "*The Doctrine of the Will, determined by an Appeal to Consciousness;*" in 1841, "*The Doctrine of the Will, applied to Moral Agency and Responsibility;*" in 1844, "*Elements of Logic, together with an Introductory Review of Philosophy in general, and a Preliminary View of the Reason.*" He delivered in 1848, the Semi-Centennial Address before the Philomathean Society of Union College, when he received the degree of D. D. In 1851, he published a treatise on "*University Education,*" and in the same year visited Europe. After his return, he issued a work, entitled "*A Step from the New World to the Old,*" in 1852. In that year he was recalled

to the chair of Philosophy in the New York University, but resigned before entering upon its duties, to accept the post of President of the University of Michigan. He visited Europe again in 1853, delivered the annual address before the State Agricultural Society of Michigan, and in 1854, received the degree of LL. D., from Columbia College. In 1856, he was elected a Corresponding Member of the Imperial Institute of France, also President of the American Association for the Advancement of Education, and delivered the annual address before that body at Albany. In the same year he issued a revised edition of the "*Elements of Logic*," and in 1857, his three works on "*The Will*," were republished in one volume at Glasgow, being a new edition, revised, corrected, and with additions. In the same year he delivered an address on *Public Education*, before the legislature of Michigan. In 1858, he delivered an address before the Alumni of Union College on the occasion of laying the corner stone of Alumni Hall. He has also delivered numerous other lectures and addresses, has contributed various articles to the "*American Biblical Repository*," and other periodicals, and has written many pamphlets and reports on education.

The University of Michigan, owes its foundation to a grant of lands made by an Act of Congress to the Territory of Michigan in 1826, which appropriated two entire townships "for the use and support of a University, and for no other use or purpose whatever." On the admission of Michigan into the Union, these lands and other avails were declared by the constitution of 1835, to be a permanent fund for its support, and its affairs engaged the earnest attention of the State Legislature in 1836. An organization was recommended in 1837, in the report of Hon. John D. Pierce, the first Superintendent of Public Instruction, and the first law, passed by the legislature, establishing the "University of Michigan," was approved March 18th of that year. In this act the objects were stated to be "to provide the inhabitants of the State with the means of acquiring a thorough knowledge of the various branches of literature, science, and the arts." A board of Regents was to be appointed by the governor of the State, with the advice and consent of the Senate. The governor, lieutenant governor, judges of the Supreme Court, and the chancellor of the State, were *ex-officio* members. Three departments were provided: of literature, science, and the arts; of law, and of medicine. Fifteen professorships were mapped out in the first of these; three in the second, and six in the third. The institution was to be presided over by a chancellor. An additional act located the University at Ann Arbor, on a site to be conveyed

to the Regents free of cost, and to include not less than forty acres.

In the first organization of the University, "Branches," as they were called, were established and located in eight of the principal towns of the State, which instead of being feeders for the central institution, as originally contemplated, exhausted the resources necessary to equip the University proper with professors, cabinets, and the material outfit for instruction, without which there were no inducements for students to resort to Ann Arbor. If the State had made sufficient provisions for these preparatory schools, it would have made but little difference what they were called, but as "Branches" they were considered entitled to support from the income of funds set apart for the university. In a few years this policy of "Branches" was abandoned, and the entire income of the university funds was devoted to its legitimate purposes of building up a State institution at Ann Arbor.

In the appointment of incumbents to the chairs of (1.) Ancient Languages; (2.) Moral and Mental Philosophy; (3.) the Philosophy of History; (4.) Mathematics including Natural Philosophy, an attempt was made to reconcile the claims of different denominations to a representation in the Faculty of Arts, by selecting a clergyman from the Presbyterian, Baptist, Methodist, and Episcopal churches, for these professorships, each of whom in turn was required to act as President for one year from the time of his accession to the office. The inconvenience of this arrangement for an administrative head, was felt from the start, but was increased by the establishment of the Medical Department in 1850. In 1852, on the reconstruction of the Board of Regents by the choice of the members by a vote of the people, this inconvenience was remedied by the appointment of Henry P. Tappan, LL. D., of the city of New York, as principal Executive Officer, or President.

In 1841, the Collegiate Department was organized, on the 20th of September, 1842, opened, and in 1843, consisted of four professors and fifty-three students. In 1850, the Medical Department was opened with three professors, and in 1852, there were 150 students. In 1853, when Dr. Tappan entered on the administration of the university, there were seven professors, including three in the Medical School, and the whole number of students of every name, was 222; and the number of graduates in the Faculty of Arts amounted to 110. His first step was to revise the course of study. This was done in a masterly manner; while the range of linguistic study, including both ancient and modern, was greatly enlarged, a scientific

course was instituted, by which the educational wants of large classes of the community engaged in useful employments were provided for. The classical and scientific courses were parallel to each other in respectability, in the term of years required for completing them, in the attention they received from the university professors, and in the academical honors awarded at their close. Students who did not wish to become candidates for an academical degree, or who might wish to supply deficiences in particular branches before entering upon a full and regular course, were permitted to take a partial course. In addition to these courses, a university course proper was indicated, the development of which has been the aim of much of Dr. Tappan's subsequent labors. His inauguration as President was signalized by the establishment of an Observatory through the liberality of the citizens of Detroit, among whom may be specially designated, Henry N. Walker, Esq., who donated three thousand dollars towards the object. In 1858, a Gallery of Casts of Ancient Statues, Busts, and Vases, was commenced, which has since been extended so as to comprise a collection of Historical Medallions, and Engravings and Photographic Views, illustrative of Mediæval and Modern History. These together constitute the Museum of the Fine Arts and History. In 1856, an Analytical Laboratory was opened, and in 1859, the Law Department was established with three professors and ninety students. In 1861, a Chair of Military Engineering and Tactics was instituted, with the design of developing a full course of military instruction. Every year some new chair of instruction was established, new material for experiment and illustration was added to the cabinets, and class-rooms, until at the close of the first ten years of his administration, Dr. Tappan and the State could rejoice in the development of the institution from very feeble beginnings into the fair proportions of a University.

By the Annual Catalogue for 1862, there were 270 Academical Students, and 345 Professional Students, or a total number of 615. In the same year the Degree of Bachelor of Arts was conferred on 37; of Bachelor of Science on 15; Bachelor of Law on 44; of Doctor of Medicine on 36; of Master of Arts on 18; of Master of Science on 5; and the Diploma of Civil Engineer on 4;—all educated in the University. In the same year there were 27 professors and other officers. The income of the university available for annual expenses had increased from $12,000 to $40,000.

The above statistics of growth and prosperity so far as we know, can not be surpassed in the same number of years in any collegiate institution of this country.

continued on page 641.

MILITARY SYSTEM AND EDUCATION IN SARDINIA.

I. GENERAL OUTLINE OF MILITARY SYSTEM, AND MILITARY EDUCATION.

The wars in which Sardinia has recently been engaged, have led to the re-organization of her armies, and to the extension and improvement of institutions for military instruction, but time enough has not yet elapsed to perfect the system.

One-third of the officers are promoted from the ranks; the remaining two-thirds, that is, all who enter as officers, must pass through the Royal Military Academy, and before being commissioned as Captain in the Artillery and Engineers, must have completed the special course in the Complementary School. Admission to the Royal Staff Corps is conditioned on attendance on the lectures of the Staff School, and the results of a competitive examination. The following is a brief outline of the system of military instruction now in operation.

1. The character of the education may be described generally as partly resembling that of Austria, partly that of France. It commences very early. Every Officer who enters the Army as such must have passed through the great Military School, the *Accademia Militare*. The minimum age of entrance is fourteen. The admission is by nomination and not by competition; and the demand has always been under rather than above the requirements of the Army. "Bourses" or Exhibitions to assist pupils in their education, have been established on the Prussian and Austrian, rather than on the French principle. They are granted by the King on the recommendation of the Minister, in consideration of the claims of deceased Officers, or other public servants, and without reference to the merits of the pupils, preference being given to the candidates whose circumstances most require assistance. From twenty-five to thirty of these *Bourses* (or rather *Demibourses*, for no pupils receive entire support such as is given in France,) are given annually. We are informed that a decree will appear almost immediately, throwing open *ten* out of this number to public competition. The entire sum expended upon them is 70,000 francs, about 2,800*l.* per annum.

Passing from this outline of the principles of Sardinian Military Education, as exhibited in the *Accademia Militare*, which may be termed the General Seminary of the Sardinian Army, we shall briefly allude to the *three* remaining Institutions, in which Officers receive instruction and training at later periods of their career.

2. Admission into the Artillery and Engineer School may be considered the reward of the most distinguished pupils of the *Accademia Militare*, who after spending their last year in that Institution in the study of the higher mathematics, chemistry, and architectural drawing, are transferred for the completion of their education to the School of the Artillery and Engineers.

3. The Staff School, the formation of which dates from 1850, is chiefly frequented by Officers of the Infantry and Cavalry, who must be below the age of twenty-eight years upon their entrance. It is carried on upon the competitive system, the Officers being ranged according to merit in their Final Examination, the ablest entering the Staff Corps in that order.

4. Regimental Schools for Officers also exist, and in every Brigade or Division, Officers are taught *topography*, under the supervision of the Chief of the Staff of the Division. Care is taken to make this teaching uniform throughout the Army; and it may be regarded as preparatory to that of the Schools at Ivrea and Pinerol, which accord with the principle of the Prussian Division Schools in requiring that every Officer shall have received professional instruction; but as regards other points, and particularly the period for attending them, these Schools are peculiar to the Sardinian Army. In time of peace, no Officer, excepting those of the Special Arms, can obtain a Company without having studied for a year in one or the other of these Schools, and having passed an examination on leaving it. The Instruction given is mainly practical, Field Fortification, the Secondary Operations of War, and Topography, being the branches of Military Science taught.

These Institutions appear to have been *primarily* established with a view to the instruction of Officers and Non-commissioned Officers throughout the Army, and in order to prevent Regiments or Corps from following some peculiar system of their own. The same motive seems to have led to the gradual reduction in number of the Prussian Division Schools. *Secondarily*, however, these Schools have been made available for the purpose of organizing and drilling the reserve of the Sardinian Army, a large body of Conscripts assembled for a few weeks in the autumn of each year in a camp

about twelve miles from Turin. This object seems to have been attained most successfully.

Quite recently a class has been added to the school at Ivrea for the exclusive education of Non-commissioned Officers aspiring to a commission; and for the sake of economy this class is to be common to Infantry and Cavalry.

It is consequently from this body of officers that teachers are derived for the topographical classes established in each Regiment or Brigade. The Staff School having been recently founded, and a period of active war having intervened since its institution, can not be supposed to have completely organized its system of instruction. We have elsewhere mentioned that Topography, the Art of War, and Fortification, are the branches of military study most attended to; but we have reason to believe that its plan of instruction will be extended. It may not be superfluous to mention the high appreciation in Sardinia of the Austrian General Staff, as tending to confirm our own estimate of the excellence of the Austrian Staff School. We have been recently informed, on the best authority, that some of the most distinguished Sardinian Officers, who, from their service in the Crimea and elsewhere, have been able to compare the merits of different Staff Corps, consider the Austrian General Staff "the best in existence."

As regards the System of Examinations, there is a Standing Board consisting of from *five* to *seven* Officers, presided over by a Lieutenant-General, which superintends all the more important Examinations of the Military Schools, such as those upon leaving the School, &c. The constant Examinations within the School, when the Cadets are being moved from one class to another, are conducted by the Professors.

The expense of Military Education in the Sardinian States amounts to 18,000*l.* annually. The Military Schools are all under the direction of the Minister of War.

5. Two Institutions peculiar to the Sardinian Service are the *Schools for Officers*, one or other of which it is necessary that every Officer under ordinary circumstances should attend for a year before being promoted to the rank of Captain. One of these is for the Infantry, at Ivrea; the other for the Cavalry, at Pinerol. In saying that *every* Officer must attend these Schools, we except that proportion of *one-third* who are promoted annually from the ranks, and whose attendance apparently has not hitherto been required.

Details respecting the organization and instruction of these schools will be found under the following heads.

II. THE ROYAL MILITARY ACADEMY AT TURIN.

The *Accademia Militare* was originally designed by Charles Emanuel, for the instruction of sons of officers of the army and of the nobility in the use of weapons, in horsemanship, dancing, mathematics, and belles-lettres. In the course of time, the institution was converted to its present purpose, of training Officers for the Sardinian Army.

The regular course of study in this school lasts apparently for six years, shortly to be reduced to five years, and the earliest age at which it is *possible* now to enter is fourteen, the *usual* age of admission being fifteen or sixteen. Formerly, boys entered at eleven and twelve, but this practice has lately been altered, to the regret of many Officers, who prefer the plan so commonly adopted abroad, of training Officers to their business as soldiers from very early years.

The peculiarity of this school is that during a portion of the course it educates Officers for all Arms in common. The most talented pupils are then selected by examination for the Artillery and Engineers, which are the two favorite services, and indeed the most aristocratic corps in the Sardinian army. The number of the pupils is limited to 200, but it is rarely complete; at present there are 180 pupils. About half of these pay for themselves a yearly sum of 1,200 francs, 48*l.*, the remaining half are supported, or partly supported by the Government. The system of *demi-bourses* prevails here as in France.

The pupils are divided into four classes, according to the years of the course; a fifth class, contains those who have been just selected for the Artillery and Engineers, who work by themselves, chiefly at the higher kinds of drawing and the Differential and Integral Calculus, and Mechanics. These senior pupils are Officers, and have each their separate room. German is taught, and there is a Course of Italian Literature, &c., but no Latin is taught in any part of the school. The system of working (at least with the higher boys) is in rooms where eight or ten are united, and apparently there is something of the *Répétiteur* system.

The arrangements of the house are excellent. The pupils appear to be strictly confined to barracks during the week, but allowed to go out on Sundays. The discipline is said to have been relaxed of late years, and this is attributed by old Officers to a cause which will appear curious in England, viz., to the pupils having *any* holidays at all. This innovation upon the simplicity of the Piedmontese system of education was alleged to have encouraged distinctions

between the richer and poorer pupils, and thus to have injured both the economy and the *Camaraderie* of the school. Great stress was laid here, as at other Military Institutions, on a strictness of discipline very unusual in England. The boys begin their work at half-past five o'clock, and work till seven; then they go to chapel for a short time, and breakfast and recreation follow immediately after. Both are concluded by eight, when they return to their studies for an hour and a quarter; then a quarter of an hour's relaxation is allowed, and the studies are resumed until eleven o'clock. An hour is then devoted to the schools of fencing, riding, gymnastics, or dancing. From twelve to a quarter before two o'clock is allotted to dinner and recreation, and then another hour is spent in the fencing, riding, gymnastic, or dancing schools. A quarter of an hour's recreation is again granted, and from three to half-past four o'clock study is resumed. A quarter of an hour's recreation follows, and half an hour is then given to military exercises, succeeded by another quarter of an hour's interval for rest. Two hours are then devoted to study—from half-past five to half-past seven o'clock. An hour is afterwards allowed for chapel, supper, and retiring to rest.

A monthly account is taken of their work, and the marks then given exercise an influence upon their places in the examinations which take place every year.

The following tables give a full view of the work of the pupils during their six years' course.

DISTRIBUTION OF THE VARIOUS BRANCHES OF STUDY IN THE DIFFERENT YEARS OF THE COURSE, AND GENERAL TIME TABLE FOR THE SCHOOLS.

Classes.	SUBJECTS OF STUDY.	Lessons Months.	Lessons In each Week.
First Year.	Catechism,	8	1
	Arithmetic,	1	6
	Plane Geometry,	1	6
	Algebra, 1st Part,	3	6
	Solids,	3	6
	Italian Elocution,	4	5
	History of Italian Literature,	4	5
	French Language,	8	5
	Caligraphy,	7	2
	Soldiers' Drill,	3	2
	Squad Drill,	3	2
	Army Regulations,	2	2
	Dancing,	8	2
	Gymnastics,	8	2
	Figure Drawing,	8	2
	N. B.—This class will be abolished at the cessation of the present scholastic course.		
Second Year.	Catechism,	8	1
	Algebra, 1st Part,	8	3
	Solids,	6	3
	Italian Literature,	8	3
	French Language,	8	3
	Battalion and Company Drill,	2	3
	Chasseur Drill,	1	3
	Garrison and Divisional Duty,	2	3
	Law on Recruiting,	1	2
	Figure Drawing,	8	2
	Dancing,	8	2
	Gymnastics,	8	2
	Soldiers' Drill,	2	2
	Caligraphy,	4	2

DISTRIBUTION OF VARIOUS BRANCHES OF STUDY—*continued.*

Classes.	SUBJECTS OF STUDY.	Lessons. Months.	Lessons. In each Week.
Third Year, General Services.	Sacred History,	8	1
	Rectilinear Trigonometry,	8	3
	Geography and Ancient and Mediæval History,	8	3
	Italian Literature,	8	3
	French Literature,	8	3
	War in Detail,	4	3
	Company and Battalion Drill,	5	1
	Chasseur Drill,	1	1
	Rifle Practice and Gymnastics,	1	1
	Topographical Drawing,	8	3
	Fencing,	8	2
	Gymnastics,	8	1
Third Year, Special Services.	Sacred History,	8	1
	Algebra, 2nd Part,	3	4
	Rectilinear Trigonometry,	1	4
	Spherical Trigonometry,	1	4
	Algebra applied to Geometry,	3	4
	Descriptive Geometry (the first 10 numbers,)	5	3
	Geography and Ancient and Mediæval History,	8	3
	Italian Literature,	8	3
	French Literature,	8	3
	War in Detail,	4	3
	Company and Battalion Drill,	5	1
	Chasseur Drill,	1	1
	Rifle Practice and Gymnastics,	1	1
	Topographical Drawing,	8	3
	Fencing,	8	2
	Gymnastics,	8	1
Fourth Year, General Services.	Ecclesiastical History,	8	1
	War in Detail,	5	2
	Art of War, 2nd Part,	3	2
	Artillery,	5	2
	Fortification,	8	3
	Physical Mechanics,	8	3
	Topography,	3	2
	Modern History, History of the Country,	8	3
	German Language,	8	3
	Army Regulations,	3	3
	Military Accounts,	8	2
	Italian Literature,	5	2
	French Literature,	2	2
	Gymnastics,	8	1
	Riding,	8	3
	Landscape Drawing,	8	2
	Topographical Drawing,	3	2
	Fencing,	8	2
Fourth Year, Special Services.	Ecclesiastical History,	8	1
	Infinitesimal Calculus,	8	4
	Descriptive Geometry, 2nd Part,	6	2
	Fortification,	8	3
	War in Detail,	8	2
	Modern History, History of the Country,	8	3
	German Language,	8	3
	Topographical Drawing,	3	2
	Military Accounts,	8	1
	Landscape Drawing,	8	2
	Gymnastics,	8	2
	Riding,	8	3
	Fencing,	8	2
Fifth Year, General Services.	Ethics,	8	1
	Physical Mechanics,	8	3
	Topography,	8	2
	Art of War,	5	2
	Artillery,	6	2
	Landscape Drawing,	3	2
	German Language,	8	2
	Italian Literature,	4	2
	French Literature,	5	1
	Army Regulations,	4	2
	Gymnastics,	8	2
	Fencing,	8	2
	Riding,	8	3
	Military Accounts,	8	2
Fifth Year, Special Services.	Ethics,	8	1
	Calculus,	8	4
	Physics,	8	3
	Topography,	8	2
	Art of War,	5	2
	Artillery,	6	2
	Landscape Drawing,	8	2
	German Language,	8	2
	Descriptive Geometry, 2nd Part,	6	2
	Gymnastics,	8	2
	Fencing,	8	2
	Riding,	8	3

PUPIL SUB-LIEUTENANTS.

Class.	SUBJECTS OF STUDY.	Lessons. Months.	Lessons. In each Week.
Sixth Year, Special Services.	Ethics,	8	1
	Rational Mechanics,	8	6
	Analysis,	8	6
	Chemistry,	8	3
	Architectural Drawing,	8	2
	German Language,	8	2
	Gymnastics,	8	2
	Fencing,	8	1
	Riding,	8	3

GENERAL TIME TABLE FOR SCHOOL DAYS.

From 5 to 5½, Rising, Dressing, &c.
" 5½ to 7 A. M., Study. From 7 to 8, Chapel, Breakfast, and Recreation.
" 8 to 9¼, School of Science and Literature. From 9¼ to 9½, Recreation.
" 9½ to 11, " " "
" 11 to 12, School of Fencing, Riding, Gymnastics, Dancing, &c.
" 12 to 1⅜, Dinner and Recreation.
" 1⅜ to 2⅜, P. M., School of Fencing, Riding, Gymnastics, Dancing, &c.
" 2⅜ to 3, Recreation.
" 4⅜ to 5¼, Military Exercises. From 5¼ to 5½, Recreation.
" 5½ to 7½, Study. From 7½ to 8½, Chapel, Supper, Dormitory.
" 3 to 4½, School of Science and Literature.
" 4½ to 4⅜, Recreation.

III. ARTILLERY AND ENGINEER SCHOOL AT TURIN.

The *Artillery and Engineer School* (*Scuola Complementaria,*) which is established in a large building in one of the suburbs of Turin, is a School of Application, intended to complete the special education of the Young Officers of the Artillery and Engineers, which the Cadets of those Corps have previously entered upon during their four last years in the *Accademia Militare.* Its course of studies occupies nominally two years, but really only eighteen months, after which the final examinations begin, and the pupils receive leave of absence. The Students do not live in barracks here, but the Inspector of the School seemed to think it desirable that they should do so. The exercises of the day commence, at eight o'clock every morning, with an hour's riding. A lecture then follows, which lasts for an hour and a half, from nine till half-past ten. The rest of the morning is left free till twelve o'clock, when the pupils return to the school till three, and where they study together in large classes in the same room; they have afterwards some military exercises till five, and are then free for the evening.

The number of pupils at the school is twenty; from ten to fifteen for the Artillery, the rest for the Engineers. The subjects of study will show what difference exists in the studies of the two Corps, and we were told that very little preference was shown in the choice of the Students for one over the other. The Engineers do not appear to be at all employed in civil works; indeed, the Government does not allow them to be so, as there are sufficient fortifications in the kingdom of Sardinia to afford them constant employment. The pay of the two Corps is equal, and is very little above that of the Infantry, and the same as that of the Cavalry. The Artillery and Engineers (the *Armi dotti*) appear to be decidedly the favorite and aristocratic corps of the Sardinian army. They rarely enter the Staff Corps, and the reason assigned for this is their unwillingness to quit their own arm of the service. The position of the pupils on entering the Corps is fixed by the Final Examination alone, and is not influenced by marks previously given for industry and application during the course, as is the case in some of the French and German schools—at the Polytechnic, for instance, and at Znaim. The only value of a high position in the Final Examination is that it gives seniority in the Corps.

The direction of the school is intrusted to a Field Officer of Artillery, assisted by two Captains, one from the Artillery, and the other from the Engineers. His authority extends to instruction and discipline.

The scientific instruction is given by professors (effective and supplementary) and by Officers belonging to the various Artillery divisions and establishments, who, together, constitute a Council of Instruction, of which the Director is President.

The examinations to which the Officer Students are subjected are held by a Commission, nominated by the Secretary of War.

Regulations respecting the Professors, &c.

The Professors and Instructors are personally responsible for the teaching of the subjects contained in the programmes and regulation for the discipline of the students in School, for the daily drawing up of the notes and execution of the drawings, and for the constant presence of the students during the time of the instructions and lectures.

The Military Professors and Instructors will maintain constantly among the students the spirit of subordination and military discipline in all its force.

The Professors not possessed of military rank, when reproof is not sufficient to keep the students to their duty, will report the matter to the Director and to the Captains attached to the direction of the School, in order that more vigorous measures may be adopted.

At the beginning of every lecture, the Professors will satisfy themselves that the students have finished the notes preceding it, and the regulated tasks and drawings.

The Professors will also have the power of visiting with arrest students who

are negligent in the execution of the notes and tasks, and those who exhibit a constant indisposition to work, reporting it to the Director of the School.

When the lectures are upon difficult subjects, it is the duty of the Professors sometimes to visit the students during the hours of study, for the purpose of explaining difficulties.

At the beginning of every lecture, the Professors will dictate to the students a summary of the lesson which they are about to explain.

At the commencement of their course of lectures, they will point out to the students the books and treatises to be followed.

At fixed intervals, as they shall judge it most convenient, the Professors will suspend the course of their lectures to satisfy themselves by questions of the attention given and the progress made by the students.

At the opening of their course, the Professors will notify to the Director of the School the hours which suit their engagements best for the giving of the lectures; these hours will be subsequently maintained unchanged throughout the duration of their course. These hours can only be selected out of those fixed in the general time table.

In case of any lectures having to take place out of the lecture-rooms of the School, they will give notice in time to the Director.

If they should consider any change in the programme necessary, they will give notice in writing to the Director of the School, so that he may be able to submit their propositions to the General Commandant.

The Instructors will exact of the students, in the execution of the practical instructions and in the explanation of them, a demeanor perfectly military, and a tone of voice appropriate to the circumstance. All the students, without exception, should render themselves capable of executing the practical tasks and explanations now mentioned with the greatest perfection.

The Professors, as well as Instructors, in concluding their course of lectures, will transmit to the Director of the School a statement showing the degree of instruction acquired by the students, and their conduct in School; the credit for the instruction and for conduct will be given by means of two distinct integral numbers, selected from two to ten.

Duration of the Course and Subjects.

The course of the Complementary School will be terminated in a year and a half.

The students belonging to two successive promotions will participate in the same instructions during the last six months of the first course, and the first six of the second course.

The subjects which will be taught to the Officer-students of the Complementary School are,—

a. Mineralogy and metallurgy.
b. Introduction to applied mechanics, and application of mechanics to machinery.
c. Theory of the combustion of powder; of the movement inside the bore; of the resistance of ordnance; of the volume, weight, and center of gravity of ordnance; projectiles.
d. Use of artillery in war, construction of batteries, service in the field.
e. Permanent fortification.
f. *Course of construction and of military and civil architecture.* } For Engineer-Officers only.
g. *Topography.* }
h. *Geodesy.* }
i. Military bridges and passage of water.
l. Classified nomenclature, and drawing of artillery materials.
m. Manufacture of powder, fire-works, arms, ordnance.

Practical Instructions.

Practical instruction will be given every day to the students of the Complementary School.

The object of this instruction is to render the Officers themselves familiar

with the execution of the operations, and with the proper method of instructing Non-commissioned Officers and soldiers of Artillery.

These instructions, which will be, as far as possible, executed and explained by the Officers of the School, will consist of—

Gymnastics.
Riding, according to the regulations in force.
The pack of the infantry soldier, armament, infantry instruction.
Classified nomenclature of the various parts of horse furniture, convenient adaptation of them; pack of the cavalry soldier.
Principles of the physiology of the horse, and of veterinary science; care of horses.
Nomenclature and use of the field, mountain, siege, garrison, and coast material.
Lading of field and siege carriages, and mountain mules.
Service of field, mountain, siege, garrison, and coast artillery.
Driving and sectional drill, battery and brigade drill.
Regulations for marches, encampments.
Charges and compositions in use in the field, in sieges, and in garrisons.
Judging distance drill, practice; remedies applied to materials in the field.

IV. THE STAFF SCHOOL.

The Staff School at Turin has only existed since the year 1850. Previously to that time the Staff was supplied by picked scholars from the *Accademia Militare.*

The whole Staff Corps of the Sardinian Army only consists of thirty-six Officers, viz., twenty-four Captains, and twelve of higher rank; no one of a lower rank than Captain being admitted even as attached to the corps, a regulation which appeared to be considered inconvenient.

Officers are required to have served four years before their admission, as is the case in the Austrian Staff Schools, and they must not have exceeded their twenty-eighth year. Again, as in Austria, the Officers on leaving the school are ranged strictly in the order of merit, as tested by a final examination; and the ablest obtain appointments to the Staff in the same order. The Sardinian School has, however, some peculiarities, partly arising from the higher position which the Special Arms (*Armi dotti*) of Artillery and Engineers hold in Sardinia than in Austria or Prussia. The method of admission is as follows:—

An Officer requests his Colonel to recommend him for admission to the Staff School. Great caution seems to be observed in giving this recommendation; but having obtained it, an Officer has no further difficulty in entering the School. In consequence of the small numbers of the Staff Corps, the demand for entrance is not very great, and there is accordingly no competitive examination. The numbers in the School have, during the first five years of existence, varied greatly—from fourteen or sixteen to four or six. A year (or rather eleven months) is the time occupied by the studies;

the first six months being given to theory, the last five to practice. The time thus occupied lasts from ten till three in the afternoon.

The amount of knowledge required for admission into the School is stated, in the "Note" of Colonel Petitti, to be an acquaintance with Geometry and Algebra, as far as Equations of the Second Degree.

The practical work consists in the usual surveys of countries, plans, &c. The young Officers are taken by the Inspecting Colonel of the School into the country, and worked hard for four or five months. There have hitherto been only places for one or two of these Officers on the Staff at the end of the year, and these (as has been already mentioned) have always been the most distinguished pupils of the School. The rest become teachers in the regimental schools. Officers leaving the Staff School do not appear to have a right to a step immediately (as in Austria) by virtue of their having been at the School; but the Sardinian system of making all the appointments above the rank of Major by selection gives them a prospect of advancement. Examinations are held in the School every three months, at which the Professors give marks of proficiency; these are combined with those obtained in the final examinations in determining the position of the pupils.

The Professors in the Staff School are all military men. The building is very good, and, although small, contains a library, instruments, museum, and all the apparatus for maps.

Among the conditions which must be met favorably to be admitted to the Royal Staff Corps are the following:—

Physique:—

If the constitution is robust, sufficiently strong, or weak.
If the sight is good, acute, or short.

Intellectual Qualities:—

If the intelligence is prompt, clear, reflective, and the mind orderly or confused.
If he is ready of speech, or uncommunicative.

Moral Qualities:—

If he is honorable, and of a good disposition, with much or little expansion of character.
If of conciliatory or rough manners.
If peaceable, quick, or irascible.
If active, resolute, authoritative, timid, or feeble.

Education:—

What degree of instruction he has arrived at in mathematics, in the theory and practice of surveying.
What ability in plan-sketching and topographical drawing.
If he cultivates any other branch of knowledge connected or unconnected with the Institute itself, and what.
If he is master of the Italian and French languages, so as to speak and write them with facility and correctness.

If he is acquainted with, and if he can speak, other languages.
If he is addicted to study.

Conduct:—

If his behavior is dignified, as becomes a soldier and a citizen.
If he enjoys the good-will of his superiors, the esteem of his comrades and inferiors.

Mode of discharging his Duty:—

If he discharges his duty with exactness and zeal, or remissly and ill.

Particular Aptitude:—

If he is more especially fitted for the duties of the surveying, topographical, or military branch of the service.
If he has shown aptitude for teaching.
If he is adapted for progress in the Corps, or in the Infantry or Cavalry services.

Miscellaneous Information:—

N. B.—Under this head will be inserted those notices which, finding no place under the preceding heads, contribute towards a fuller information respecting those Staff Officers who, in consequence of circumstances and duties special and unconnected with the service of the corps, may afford ground for special mention.

V. REGIMENTAL SCHOOLS OF IVREA AND PINEROL.

The requirement of professional study from Officers after entrance into the Army is a point almost peculiar to the Sardinian service. The *principle* of the Prussian Division School is, indeed, almost the same as that of the two Schools we are about to describe; but the examination for which the Division Schools prepare is a qualification for obtaining a commission, and not (like that of the Sardinian Schools) for subsequent promotion. And this difference is partly owing to an obvious cause, the slowness of promotion in the Prussian Service. If the Division Schools and their examination were placed before the promotion to a Captaincy, the candidates attending the School would be in most cases nearly forty years of age.

Some instruction in Topography is given to the Officers of every Regiment in the Sardinian Army, under the direction of the Chief of the Staff of the Division. Care is taken to render the teaching uniform throughout the Army, and it may be considered as a preparation for the more systematic instruction given in the Schools of Ivrea and Pinerol. The former of these is intended for the Infantry; the latter for the Cavalry. Every Officer, excepting those of the Special Arms, must have passed a year of study in one or other of these Schools, as well as a subsequent examination, before he can obtain a Captaincy.

The studies are mainly practical, as may be seen from the "Prospectus of Instruction" annexed. Topography, Field Fortification, and Secondary Operations are the only branches of Military Science

in which instruction is given; and upon these much care appears to be bestowed.

One-third of the Officers of the Sardinian Army are promoted, as has been mentioned, from the ranks. Accordingly, a class has been recently added to the School of Ivrea, intended exclusively for the Education of those Non-commissioned Officers who aspire to a Commission. This class is to be common to Infantry and Cavalry.

The following extracts from the Regulations of the Minister of War, will exhibit the practical character of instruction in this class of schools.

Prospectus of Instruction to be given to Lieutenants in the Military School of Infantry.

Soldiers' Drill, Squad, Company, Battalion, and Chasseur ditto, &c.
Fencing with the Bayonet.
Exercise of the various Arms, &c.
Musketry Practice.
Regulations of Discipline, Garrison and Field Regulations, Army Accounts.
Secondary Operations of War.
Topography.
Field Fortification.

School of Topography.

It is decided that such instruction [in Topography,] shall take place from the commencement of March till the end of July.

This will be obligatory on Officers who have not passed the age of thirty years.

Those Corps, however, who may think that they can thus employ themselves in the winter also for the hour or so which may remain over after the other occupations of the Officers, shall have the power of establishing, from the beginning of November, a school, in which drawing and other preliminary acquirements may be taught.

This School will be attended especially by beginners and the less educated, who will thus be able better to profit at the beginning of March by the lectures given to the Officers more advanced in this study.

The Schools will be instituted for regiments or brigades, according as the General commanding the Division shall determine, upon the report of the Chief of the Staff, regard being had to the Director who can be assigned to them and the opportunities afforded by the situation.

In cases, however, where it may be convenient, they can institute Divisional Schools as well, which will be attended by the Officers of the different corps already more advanced in the study.

There they will be exercised, by direction of the Chief of the

Staff, in the various subjects taught in the School, especially in the application upon sketches of themes of secondary operations of war, and will be taken into the field to execute surveys on the spot with the instruments and by the eye.

In this case, in the Regimental Schools, the less educated officers will be trained under the direction of Officers who have given proof of sufficient capacity.

The Officers of the Detachments of Cavalry or of the Rifles, for whom it may not be convenient to establish separate schools, will attend those schools of their garrison to which they are assigned by the General Commandant of the Division upon the proposition of the Chief of the Staff.

Inasmuch as this Ministry is careful to provide the Schools of Topography with the instruments necessary for the practical training upon the ground, it makes known henceforward the implements with which they must be provided, at the charge of the Treasury, in cases where they do not already possess them, viz.:—

Small tables, with desks. Seats or stools. Slate, with stand. 2 pieces of Indian ink. 2 ditto of French blue. 2 ditto of gum. 2 tablets of carded wool. 1 case of mathematical instruments. 2 plane rulers of one metre each, besides some rulers of various dimensions, the necessary paper for themes, &c. 2 penknives. Some pencils. 1 paper of steel pens for drawing. Half a bundle of crows'-quills. Chalk for the slate, and sponge. Inkstand, with ordinary ink. 2 crayons (*coulé*) of No. 2. 2 ditto of No. 4. 2 pieces of Indian rubber.

GENERAL SYLLABUS OF INSTRUCTION FOR THE INFANTRY OF THE LINE.

Months of November, December, January, February and March.

Recruits will be kept separate from the seniors during these five months in all the instructions (except the drills.)

They will be instructed progressively once a day in soldiers' and squad drill.

They will attend daily the gymnastic exercise and the school of reading and writing.

N. B. As they shall progress by degrees in the various branches of instruction, they will take their part in the service, at first on duty where arms are not required, and afterwards with their arms, as much as possible always upon public holidays.

Seniors will have to attend the school of reading, writing, arithmetic, and gymnastics daily.

The recruits as well as the seniors will be prepared for the practice range, during the months of February and March, by aiming at the butt and firing at the candle.

The Officers, especially the juniors, will be encouraged to exercise themselves in gymnastics, and to frequent the School of Topography.

The Captains will be taught riding as much as possible where they are in garrison with Cavalry.

In the months of February and March the Officers will be further prepared in the appropriate theory, with a view to the instruction of the following months, and all without exception will have to practice firing with the rifle.

April and May.

There will be no further distinction made between the recruits and seniors.

They will pass successively through soldiers', squad, and company drill, bayonet exercise, and rifle practice at the butt.

The school of reading, writing, and arithmetic, and gymnastics, will be continued at least for the lower classes.

The Captains will give instruction to their companies, especially in bad weather, on the subject of packing necessaries, and on the general behavior of the soldier under different circumstances on and off duty, showing them also the manner of making reports in a few clear and concise words.

The Officers will be prepared by the appropriate theoretical training for the instruction of the following months.

The School of Topography will be continued as much as possible for the Officers who desire to attend it.

June, July, August.

They will pass successively through battalion drill and regimental and brigade manœuvres.

The rifle practice at the butt will be continued.

The *Chasseur* exercise will be taught.

The swimming school will proceed with the utmost possible activity.

The school of reading, writing, and arithmetic, and gymnastics will be continued at least for the lowest classes, as much at least as the instructions in other subjects, and especially swimming, permit.

The Generals of Brigade will explain theoretically to the superior Officers and Captains, and these latter to their own companies, the nature of service in the field.

September.

By frequent marches instruction will be given in field service, practical in its nature, and separate for every arm.

Manœuvres and evolutions appropriate to the ground will be gone through.

The troops will be disposed for the defense of a village or a position, of a stream, or the like.

October.

The instruction in the field will continue as much as possible, and especially in the garrisons where troops of different arms are quartered, one part of the force can be opposed to the other, and, where the service of the place permits it, by calling in the assistance of the National Guard, the garrison will be able entirely or in part to absent itself for two or three days.

GENERAL RULES RELATING TO THE INSTRUCTIONS.

1. As far as is possible the soldiers should receive at least two lessons in the day.

2. In the months of April, May, June, July, and August, the drill in the *place d' armes* will take place only once a day, the other will be in the barrack or the neighborhood.

3. The Officers should give the instructions themselves, and should never appear as idle spectators before the soldier.

The subalterns will themselves conduct the soldiers' and squad drill, and the bayonet exercise.

The Captains will be careful to instruct their own companies. At the rifle practice all the Officers of the Company should be present and interest themselves for the good working of so important a subject of instruction.

4. During recreation times, and in all those kinds of instruction which do not require silence and immobility, the Officers will be careful to converse with their inferiors, and to study their character and qualities, praising and encouraging the good to do well, and visiting with words of blame more or less severe those who are ill-regulated in their conduct.

5. In order to interrupt as little as possible the course of the instructions, the Colonels and Generals of Brigade will avail themselves of the festivals accurately to review the men before and after mass.

6. In forts the Infantry will be exercised at the service of guns according to

the directions which will be given to the Officers of Artillery commanding in them.

7. Some Non-commissioned Officers in every regiment will be trained as the carpenters for making cartridges.

8. In the interior of the barracks the men will be encouraged to amuse themselves, and be gay, rather than to loiter about in idleness. It will be most advantageous to introduce singing to music, as was done in the camp of 1846.

9. In the month of August, Staff Officers will be dispatched to the principal garrisons who, being attached to Generals of Brigade and Division, will prepare with them the projects and plans for the field instructions of the months of September and October. These Staff Officers are further particularly charged to study the environs, and to point out in reports for that purpose the most important military positions, and the mode of occupying them.

10. Appropriate instructions concerning the rules to be observed in the rifle schools, concerning the swimming school, and the exercises in the field, will be forwarded at the proper time.

VI. SCHOOL OF ARTILLERY IN THE ARSENAL.

Men, who are destined to work in the arsenal, receive here practical instruction in their art. The arsenal contains, 1st, a chemical and metallurgical laboratory, in which analysis, &c., are performed; 2d, a mineralogical collection, containing 1100 specimens of minerals, and many models of crystalization, besides a complete collection of specimens from the territory of Genoa; 3d, a collection of philosophical apparatus, containing 600 different machines and instruments, partly from Puxy and Dumotier of Paris, and partly from Zest and Brabante of Turin; 4th, a library containing the best books on Mathematics, Natural Philosophy, Astronomy, Geology, Geography, &c.; 5th, a foundry of cannon, which includes the foundry properly so called, the atelier of modelers, the hall of models, the ateliers of trepans and of engravers; 6th, the lithographic establishment; 7th, the machine shop; 8th, a manufacture of all kinds of arms for the army and navy; 9th, the atelier of bombardiers; 10th the manufacture of gunpowder, and refinery of saltpetre; 11th, a forge for gun-barrels.

III. EAGLESWOOD MILITARY ACADEMY,

AT PERTH AMBOY, NEW JERSEY.

The Eagleswood Military Academy was established at Perth Amboy, N. J., in October, 1861. Perth Amboy is a quiet little city of about 3,000 inhabitants, which, before the Revolution, was the seat of government for the province of East Jersey, and subsequently was the capital of the State until 1790. It is 21 miles from New York, to which it has access by three lines of steamboats and by the Staten Island railroad. Its site is a beautiful point of land, which is washed on the east by Staten Island Sound and on the south by Raritan Bay. The climate is healthy and remarkably mild, and the city has long been a favorite place of summer resort for the enjoyment of its temperate air and its facilities for salt-water bathing. The estate of Eagleswood lies about a mile westward from the town, and fronts for half a mile on the navigable waters of Raritan Bay. Its shore is abrupt and picturesque, fringed for the most part with woods and shrubbery, and indented with green and shady ravines, the largest of which is inclosed by high banks, covered with fine old forest trees, and forming a natural park of nearly a mile in length and of great and varied beauty. The remainder of the estate comprises about a hundred and fifty acres of gently undulating land, and includes spacious lawns, playgrounds, gardens, and cornfields, together with about a dozen dwelling-houses and a large edifice containing studios for artists, several of whom have lately taken up their abode at Eagleswood—among them William Page and Inness, the distinguished landscape painter.

The main building of Eagleswood, which is now almost entirely used for school purposes, is a fine freestone edifice in the Italian villa style, 254 feet long and two and three stories high. In the basement a corridor extends the whole length of the building, affording at all times a convenient and sheltered communication between the different parts, while piazzas extend along the front of the first and second stories, upon which open windows reaching to the floors. The flat roof, surmounted by a balustrade, commands a magnificent view of Raritan Bay and of the Neversink hills. The building is warmed by steam, lighted by gas, and supplied throughout by water from a neighboring brook, fed by never-failing springs.

A school-room, with separate desks for a hundred pupils, a dining-room, a large parlor for dancing and other social purposes, an armory, a laboratory and various recitation rooms, occupy a large portion of the building; the rest is divided into sleeping rooms, some containing one, others two or three, none more than four, beds—an arrangement which is thought by the teachers of the institution to be better adapted to the preservation of good order and good morals, than that which collects, as in many academies, the students into one or two large dormitories.

In the rear of the main building is a large and well-furnished gymnasium in which, besides the usual appliances for systematic exercise, there are bowling alleys for the use of the students. Experience has proved, however, that the regular daily drill with the musket supplies of itself an ample sufficiency of thorough, steady, and healthful exercise.

On the establishment of the Academy in October, 1861, it opened with about thirty pupils. During the term ending July 1, 1862, there were seven instructors and fifty-six pupils; during that ending July 1, 1863, eleven instructors and eighty-seven pupils.*

THE MILITARY DEPARTMENT of the Academy consists of a superintendent, who is a regularly trained military officer,† and of the following officers selected from the cadets themselves: a lieutenant-colonel, a major, an adjutant, a quarter-master, a sergeant-major, five lieutenants, an orderly sergeant, a color sergeant, six sergeants and six corporals.

The following is the general daily routine of the school as stated in the catalogue:

REVEILLE.

At Reveille, Cadets will immediately turn out and prepare for roll-call.

MORNING PARADE, INSPECTION AND BREAKFAST.

Formations will always be in that locality where the call is sounded; if the call is from the upper piazza, the formation will be made in the public hall. At the sounding of the "*General*" the Cadets will assemble.

At the "*Assembly*" the companies will be formed by the Sergeants, under the command of their respective Officers.

At the sounding of "*To the Color*," they will be marched to the *Color line*, and there formed for inspection, when the officer in command, with the adjutant, will inspect the battalion, the adjutant making memoranda of anything not in order; when finished, they will return to place. The order will then be given, "Close order: march," when the rear rank will close on the front. The adjutant then gives the order, "The parade is dismissed," at which the Officer of the Day, and field and staff officers, will leave the parade.

When the Officer of the Day, and field and staff officers, shall have left the parade, the call, "*To breakfast*" will be sounded; the captains will direct their companies to their respective tables; on arriving at the tables, each captain will take position in rear of his chair, at the head of his table, his sergeant taking the foot, and the cadets taking position corresponding to their places in the ranks; all will remain standing in rear of their respective chairs until the blessing has been asked, and the officer in command gives the order, "Seats;" at which the cadets will place their caps under their chairs, and quietly take their seats. When the cadets at each table shall have finished their meal, the captain will rise and look at the adjutant, who will acknowledge the report by raising his right hand; the captain will then resume his seat; when all shall have reported, the adjutant will make it known to the officer in command, who, rising from his seat, will tap on the table, and give the order, "Rise," at which order each cadet will rise, put on his cap, step to the rear of his chair, putting it in place, and facing towards the door; at the order, "March," from the adjutant, the captains will advance, followed by their companies, in proper order, and proceed to their parade stations on the campus, and break ranks.

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* Among the pupils, whose names and those of their parents are in the catalogue, are the sons of Generals Birney, Heintzelman and Robinson, and Colonels Bache, Drew and Morse of the army; and of Admiral Porter and Commodore Kearney of the navy. For the present term, which opened Sept. 1, we understand that a largely increased number of pupils have already entered.

† Colonel F. N. Freeman, a graduate of the military school at Norwich, Vt., and author of "*A Military Manual for Schools*, (New York, 1862.)"

GUARD MOUNTING.

The Police Guard will be mounted at 7:30 A. M., according to the form prescribed in the army regulations.

THE SICK CALL

Will be sounded at 7:45 A. M., when all desiring to be excused from duty will repair to the place designated for attending to the sick.

MORNING STUDIES AND RECITATIONS.

At the study call, the cadets will proceed to their respective desks, quietly, and immediately commence their studies.

No books will be kept on the desks except those required for study, or for reference. The cadets will be careful in using their ink, and not throw it from their pens on the floor. All scrap-paper will be thrown into baskets provided for the purpose. Newspapers, &c., when read, may be put in the baskets. All communication between the cadets during study hours is strictly prohibited.

FROM STUDIES.

At the call, studies will cease, when books, papers, seats, &c., will be neatly arranged.

DINNER.

At the call, all books, papers, &c., must be put in order, after which the cadets will form on the campus, in their respective places, muster, &c., and march to and from dinner, in the order prescribed for breakfast; on returning to the campus, they will be formed and dismissed by their captains.

DRILL.

The cadets will assemble as for morning parade, and be marched to the armory for arms, in the order of rank of their officers, the senior officer going first. The drill will continue from one hour to one hour and a half.

EVENING PARADE.

The cadets will assemble as prescribed for morning parade, when the conduct-report, detail for the day following, and orders, are read. After the parade has been dismissed, at the call, "*To Supper*," the captains march their companies to supper, as prescribed in directions for breakfast. After supper the cadets assemble in the public hall for prayers and the settlement of the reports on the book of the Officer of the Day.

EVENING STUDIES.

At the call, the cadets will repair to the school-room, as prescribed for morning studies. No cadet will leave his desk without permission.

TATTOO.

At the call, the cadets will retire to their quarters, and at "taps" they must all turn in, and all noise must cease.

At ten o'clock, the Officer of the Day and the Quartermaster-sergeant will go through the barracks, see all study-room windows, study and recitation room doors closed, and all lights out, except that in the main hall, and will report to the Military Superintendent, at his office, who will then give them permission to turn in.

Of the effects and tendencies of this system, as developed by the experience of several years, the opinion of the authorities of the Academy is thus expressed:—

"The military discipline, on which the whole system is based, is found to produce the happiest effects upon the general conduct and bearing of the cadets. It inculcates the useful lesson of cheerful and ready obedience. It gives self-

respect and promotes the growth of feelings of honor and true independence. The cadet who has been elevated by good conduct to a position of command over his comrades, naturally feels the honorable responsibility which such a command involves, and is consequently careful to set a good example to those in the ranks; while they, in their turn, seeing that good conduct and compliance with the rules of order insure promotion, are inspired with an honorable ambition to rise by the same means.

One of the great evils of schools is the reluctance which a generous boy naturally feels in reporting to the teachers infractions of order, and so incurring the stigma of tale-bearing. But where the cadets, under strict military discipline and the constant supervision of the teachers, are required to govern themselves, this entirely ceases. Two years' experience has proved that an officer never incurs the ill-will of his command by the performance of his duties, but that, on the contrary, the best officer, the one who is strictest in reporting all infractions of discipline, is also the most loved and the most popular. The reports, too, being read publicly every evening, in the presence of the teachers and the cadets, who are thus given an opportunity of exculpating themselves, present an effectual hindrance to the petty tyranny and jealousy, as well as to the combination among the pupils against the teachers, which all, practically connected with the work of education, admit to be among the most serious difficulties encountered by them in the discharge of their onerous duties. Treating boys as responsible beings, possessed of honorable feeling, is the surest way of inspiring it.

The objection is sometimes made to the system of military training in schools, that it stimulates the love of arms and produces a disrelish for the ordinary pursuits of peaceful life. Practical experience, however, shows that there is little force in this objection. As a passion for the life of a sailor is often cured by the experience of a single voyage, so the natural inclination of our American youth for the pomp and circumstance of war is quite as likely to be satiated by the familiarity with military matters acquired at the Academy. At the same time the advantages of such familiarity, when in time of war the country calls for the services of her citizens, are too obvious to be more than alluded to. In such emergencies, the graduates of our military schools will be naturally looked to by the people as their leaders in the field.

The real object of military discipline in the Academy is not to make soldiers only of the students, but to give them strength of body, vigor of constitution, and manliness of bearing; to fit them not merely for the field of battle, but for all employments and departments of life which demand vigor, energy, and endurance. The effects of the drill, of the regular, daily, systematic drill, under competent officers, in restoring to health and strength delicate, dyspeptic and debilitated youths, would be alone sufficient to assure us of its high utility. The promptness, accuracy, and general habits of order and precision to which cadets are trained, together with the steady cultivation of fidelity, honesty and courtesy, as essential to military excellence, have also been found of incalculable value in fitting them for legal, mercantile and, in fact, all professional and business pursuits.

In its influence upon manners, the military system is especially remarkable. It accustoms the pupil to ready and cheerful obedience to his superiors, while at the same time it cultivates an erect, manly and graceful bearing, and enjoins good temper and good breeding as equally essential to the true soldier and the true gentleman."

The Academic Department of the School is divided into four classes, of which the following is the prescribed order of studies:

PREPARATORY DEPARTMENT.

English Language: Easy lessons in composition, with text-book, reading, elocution, writing, spelling and punctuation.

Arithmetic: The four first rules—simple mental exercises.

Geography—Descriptive: Outline map-drawing, with blackboard delineations and familiar oral descriptions.

History—United States: Easy outlines. *Natural History:* Familiar lessons. *Drawing.*

JUNIOR DEPARTMENT.

English Language: Composition; elements of grammar; analysis of sentences; study of words; reading, elocution, writing, and spelling.
Mathematics: Arithmetic; Algebra begun.
Latin, begun. *French*, begun.
Natural Philosophy: Continued. *Chemistry. Astronomy.*
Geography: Descriptive and physical, map-drawing.
History: United States, and outlines of English history.
Natural History, continued. *Drawing.*

MIDDLE DEPARTMENT.

English Language: Composition; grammar; criticism; rhetoric; elocution.
Mathematics: Algebra and Geometry.
Latin. French. German, begun.
Geography: Statistical and commercial.
Astronomy: Continued. *Natural Philosophy. Chemistry:* Analytical. *Meteorology*—with keeping of tables.
History: Universal. *Natural History*, completed.
Science of Government: Constitution of the United States.
Book-Keeping: Single and double entry. *Drawing.*

SENIOR DEPARTMENT.

English Language: Extempore speaking and oratory; history of English language, and of English and general literature.
Mathematics: Trigonometry; conic sections; analytical geometry; calculus; astronomy, with calculations of eclipses and occulations.
Mensuration, Surveying and Navigation.
Latin. Greek. French. German. Spanish.
Philosophy: Moral and Intellectual. *Logic. Philosophy of History.*
Political Economy: Nature and origin of political constitutions and laws; nature and objects of international law; rights and duties of nations in time of war.
Physiology: General and Comparative. *Anatomy:* Human and comparative.
Classes are formed in Military Engineering, including the location and construction of field and permanent works, the attack and defense of fortified places, the construction of mines and galleries, also in the art and science of war, including strategy, logistics and tactics.

The following persons constitute the faculty of the Academy at the present session:

Col. F. N. Freeman, Military Superintendent and Teacher of Topographical Engineering and Surveying.
Mr. Edward Butler, Academic Superintendent, and Teacher of Geometry and Moral and Intellectual Philosophy.
Mr. John Lowry, Elocution and English Branches.
Mr. Robert Carter, History, Geography and Belles-Lettres.
Mr. R. W. Linen, Latin, Greek and Chemistry.
Mr. Harry P. Gray, Mathematics.
Mons. Couvens-Delfosse, French and Higher Mathematics.
Mr. Ohlfsen Bagge, German and Music.
Mr. George Platt, Book-keeping, Surveying and Navigation.
Mr. G. W. King, Figure, Landscape, and Mechanical Drawing and Painting.
Mr. F. H. Fredericks, Dancing and Calisthenics.
C. McKnight Smith, M. D., Surgeon.

IV. FENELON AND HIS EDUCATIONAL VIEWS.

Fenelon, (Francis De Salignac De La Motte,) next to Bossuet, the most prominent French divine during the reign of Louis XIV, made himself eminent also by his active educational labors and especially as tutor of the princes, whose training he conducted with such extraordinary skill that no one who has ever occupied a similar position can be compared with him. Eminently fitted for the duties of the office by the comprehensiveness of his knowledge, he also possessed the clear, far-seeing vision of a statesman and the love enduring every test, of a father. Conscious that with the management of the three princes the future of France was in a large degree intrusted to him, he devoted to his office all the rich resources of his intellect, all the powers of his soul, all the fruits of unceasing thought and a widely varied experience. And the results of his exertions were in truth, in one respect at least, surprising, and what he did in order to effect these results, though always unassuming, for that reason deserves passing notice, and is also assuredly of importance as showing the condition of educational matters in his times. We propose to give briefly a sketch of his labors in this field, leaving out of view all that relates to his position in the church and to his theological controversies.

Fénélon belonged to an old family of southern France, and was born, August 6th, 1651, at the Chateau Fénélon in Perigord. His father, a man of much intelligence, watched the education of this son with much solicitude, who though of a delicate constitution, soon manifested brilliant talents; and he had the pleasure of seeing his remarkably susceptible but also equally remarkably thoughtful boy make the most rapid progress. When twelve years old he had already a tolerable knowledge of Greek, spoke the Latin language with fluency, and had read such authors as were accessible to him. Being intended for the church, he studied for several years at the University of Cahors, and thence came to Paris to reside with his uncle, the Marquis Antoine de Fénélon. Here the youth of

eighteen received most flattering applause as a preacher, but willingly followed the prudent advice of his uncle, and withdrew from the empty bustle of the world to the theological Seminary of St. Sulpice, where he spent five years in preparation for his profession as priest. After ordination he resumed his public labors, and devoted himself especially to the religious wants of the poor and sick. He was then placed by Harlay, archbishop of Paris, at the head of a society, composed of young ladies of the highest rank, which had been formed for the catholic education of Protestant girls. He continued in this position for ten years, a mild and impartial adviser of both teachers and pupils, their fatherly friend and guide. His work upon "*Female Education*" (*De l'Education des Filles,*) which has gone through many editions, and been translated into the principal languages of Europe, was one result of this ministry. This work has its deficiencies and defects; but it abounds in excellent and truthful observations upon the character of children, is full of practical directions for the culture of the mind and heart, and as one of the first attempts to discuss systematically the problems and peculiarities of female education, will always be esteemed a remarkable performance. When Louis XIV, ever desirous of the conversion of the protestants within his kingdom, appointed Fénélon to the mission in Poitou, it was evident to all who knew him, that no one united to the knowledge necessary for such an agency, as much of the power of love and so delicate and reliable tact, as he had thus, as superior, of the "Nouvelles Catholiques," fitted himself in the most suitable manner for such a mission. But the duty which he entered upon, was a most difficult one. The protestant population in the province of La Rochelle, which had been committed to the care of Fénélon in connection with his intimate friend, the Abbé de Langeron, and the afterwards renowned Fleury, was firm and decided in its faith, and having been embittered by repeated harsh measures, was little accessible to the instruction and prayers even of a Fénélon. As he entered upon this task, appeared his book upon the "*Office of the Pastor*" (*Sur la Ministere des Pasteurs.*) On his return to Paris he advised the king to patience and indulgence towards his protestant subjects, and then entered again upon his humble duties among the "Nouvelles Catholiques." Having now attained to the maturity of manhood, he seemed still desirous of avoiding the paths of ambition.

But when it became necessary to select tutors for these sons of the Dauphin, the dukes of Burgundy, Anjou, and Berri, Fénélon could not be overlooked. He had written his work upon "*Female Education,*" for the Duchess de Beauvilliers, who educated her chil-

dren with the most faithful attention and truly christian scrupulousness, and the husband of this excellent woman, who had been placed as governor over the princes by their royal grandfather, sought to obtain the services of Fénélon, above all others, in their education. The scruples of those who believed that they saw in him a marked Jansenist, were overcome by Bossuet, and his election was the source of great and wide-spread joy and was made the subject of a prize essay by the Academy of Angers.

Several distinguished men were associated with Fénélon in this important work. The Duke de Beauvilliers was in every respect a man of sterling character, of exemplary piety and unalterable fidelity, and he ever preserved a most happy degree of harmony among his co-laborers,—Fénélon, the Abbés de Langeron, Fleury, and de Beaumont, with the Jesuit, de Valois, a confessor to the young princes:—who were all placed under his general direction, but were permitted by him to freely act, each in his own peculiar way. Unlimited confidence was placed by him in Fénélon, who soon became the soul of the course of training that was pursued, and devoted to it all his powers of mind and heart, undisturbed among the rapidly shifting scenes and amusements of court life.

The problem that first arose was a very difficult one. The oldest of the three princes Duke Louis of Burgundy, had passed his seventh year when Fénélon became his tutor, in September, 1689. He was endowed with noble talents, but unfortunately was also subject to frequent attacks of ungovernable passion, quickly succeeded by a defiant obstinacy which was strenghtened by the consciousness of his princely rank; with a capacity for every excellence, he was still in continual danger of sacrificing all that is most noble to the indulgence of a hasty temper; the firmness of his attendants provoked him—their indulgence fostered his pride; by injudicious management he could be made the slave of pernicious habits and degenerate into thorough wickedness. So much the more difficult was Fénélon's task. He perceived immediately that he must win the affections of his pupil before he could attempt his mental culture; and this he succeeded in doing, while at the same time, with a patience calm and invariable, and that skillfully took advantage of every favorable moment, he checked the boy's excessive excitability, caused him to feel that his ebullitions of passion were debasing and injurious, and brought more and more home to his proud young heart the necessity of acknowledging himself as in every will and deed opposed to the Lord of lords, before whom human greatness and nobility are nothing, and only humility striving for purity and

truth, can stand. In this Fénélon was aided by a natural ability of using in manifold forms a boundless store of excellent instruction; pleasant stories, simple allegories, sprightly dialogues, mythology and history, the writings of the poets, orators, and philosophers were employed for the purpose; and if we examine the almost endless collection of tables, fables, and conversations which were written by Fénélon for his pupil's benefit, it will be immediately seen with what care and diligence he conducted his work, and with what accuracy and distinctness he strove to bring out every point in the different exercises. At the same time he knew how to associate various different exercises with his instruction, requiring the prince sometimes to translate what was given him, sometimes to repeat it orally, to imitate it in different ways, and thus fix it so much the more firmly in mind. But he was still little inclined to hasten by special incentives the intellectual development of the boy, which in one as gifted and with a mind as remarkably active could have been easily excited to an excessive degree; only while he brought to the notice of his susceptible pupil, in conversation, in his sports, at table, and in his walks, the most pleasing objects judiciously related and in proper succession, he strengthened his habits of attention, induced the power of connected thought, and a certain degree of independence in the employment of his perceptions. The former course was followed by him in the earliest oral exercises. The boy soon took great pleasure in the study of Latin, which Fénélon conducted by first forming for him sentences from the simplest elements, and then deducing from them the value of the language, in order to lead him on to observe the peculiarities both of the Latin and the French.

Under such treatment the boy's powers developed with great rapidity. He comprehended with care and retained with firm hold whatever he once understood. His judgment was accurate and subtle, his fancy lively and rich, and hence he applied himself with growing earnestness to the abstruse and also with wonderful eagerness to the comprehensive. At first, by only grasping at that which was above him, as if in flight, he soon acquired a delight in going methodically forward, and therefore made only the more rapid advances. His character also became continually more settled. As, however, an excessive vivacity gave place to a very striking degree of bashfulness, arising from his desire to avoid errors of thoughtlessness which gradually grew into an aversion to any appearance in public, Fénélon took special pains again to accustom the prince to associate freely with others, while his sympathy for others' suffer-

ings, which had sometimes manifested itself in violent outbursts of feeling, Fénélon had also the skill to transform into a noble benevolence. Moreover, at a later period, the duke was always very prone to watch himself closely, and to receive calmly any unpleasant truths that might be told him. He manifested a strong susceptibility to religious influences, whence he soon drew a controlling motive for the avoidance of wrong-doing, as well as for the growing strong in the right.

Of course as his education advanced, it embraced both geography and history, and here the land, of which the prince was to become ruler, was treated of with such accuracy as was becoming and possible in the want of all apparatus of instruction. By degrees his studies were extended to include philosophical subjects. But here Fénélon did not permit himself to indulge in lofty speculations; he presented only what might seem to bring into close connection the knowledge that had already been gained, accustom his pupil to continuous thought, enable him to take a broader view of the domain of knowledge and of life, and reveal to him new paths and new limits. The course of instruction seems to have had a historical character. The prince was to be taught how the errors of the ancient philosophers were not only errors of the understanding but of pride overstepping the bounds that God has ordained, and how, nevertheless, they all concurred in great truths, though indeed the noblest were able to furnish only weak supports and motives to a moral life. This again afforded an easy transition to a more accurate estimation of the excellency of Christianity, and it appears that the prince, having attained to greater independence of action, though ready to accept unquestioned whatever was taught under the authority of the church, still asked for a clearer and perfect understanding of its doctrines which Fénélon sought to effect by defensive arguments drawn from historic apologetic statements. [See his "Letter's upon the different objects of Metaphysics and Religion."]

But while he lead on his pupil, whose appreciation of the truth was continually growing more acute, to these fields of knowledge, he sought to make himself also at home in the domain of the fine arts. He had himself endeavored, by intercourse with the painter Mignard, who often had his residence in Versailles, to gain a deeper insight into the elementary rules of art, and the special peculiarities of the old and the modern masters, and how skillfully he now introduce the prince into the world of beauty, is shown by the two

"Dialogues of the Dead," in which he represents Poussin as conversing with Parrhasius, and afterwards with Leonardo de Vinci.

Special interest, however, certainly attaches to the manner in which he had studied classic literature and made it a means of imparting instruction. He was acquainted with Greek literature to a considerable extent, and it is to be remarked that he took the greatest delight in Homer, whose poetry he considered only inferior to that of the old testament, while contrary to the opinion of the learned of his age, he placed Virgil far below him. It is therefore not surprising that among the tragic poets he had a strong preference for Sophocles to whom he also gave a decided prominence over the renowned dramatists of his time. So, too, the eloquence of his cotemporaries seemed to him to stand in strong contrast to the productions of the ancient orators, and Demosthenes was with him the superior to Bourdaloue, Bossuet, and Massillon. With the Greek historians he seems to have had less sympathy. Of the Latin writers, he prized Cicero most highly, and while he criticised sharply the faults of his orations, his rhetorical writings were made the object of the most diligent study. Virgil he placed, indeed, below Homer; but he warmly acknowledged his peculiar excellence, and he appreciated also the beauties of Horace. With the Latin historians his acquaintance was intimate. But extended as was his knowledge of classical literature, he was little inclined in an educational course to extend the circle of these studies without a well arranged plan; he had even no hesitation in declaring that the classical ages, though they showed a development extending through centuries, yet, in fact, had produced but few works of authority as models. Moreover, as was the case with all the critics of that period, he selected out from the classics their formal beauties especially, and rather neglected the pages, as they actually stood, of the works of antiquity. *Youthfulness*, truth to nature, and simplicity were regarded by him as the points in which the ancients chiefly excelled. It was for these that Homer was so dear to him, and perhaps he was the first among moderns upon whom has opened the whole splendor of Homer's poetry, and by whom it has been actually understood. Hence, he sought to introduce his royal pupil into this world of wonders by translating for him, full extracts from those books of the Odyssey, which narrate the wanderings of the hero. It needs but be mentioned here how closely Fénélon's "*Telemachus*" was associated with this endeavor. Of the Latin historians, the prince studied successively Cæsar, Livy, and Tacitus; and it is worthy of remark respecting both scholar and teacher, that he took great delight in Tacitus,

of whose works he afterwards made a complete translation. For the reasons of this preference, see his "*Dialogues sur l'Eloquence.*"

The historical instruction of later years was imparted by means of carefully prepared lectures. In order to instruct him aright in church history, the princes read, in addition to the historical books of the Bible, select letters of Cyprian, Ambrose, Augustine, and Jerome, and extracts from Prudensius and Paulinus,—closing with Bossuet's "*Histoire des Variations.*" The reading of Sleidan would have been included if the work of this protestant historian could have been obtained in a French translation. In civil history, the portions of most importance for the prince was of course the history of France,—but he read also by degrees the principal works respecting the Netherlands, Germany, &c. In connection with the lectures, to make them more complete, various written aids were used, such as abstracts, chronological tables, &c. In scientific studies the prince took the greatest interest, and it is also to be noted that he had read Cato's book upon Agriculture, Columella, Hesiod's "*Works and Days,*" and Xenophon's "*Oeconomicus.*" He was, however, restrained from the study of Natural Philosophy, from the apprehension that he would devote himself to it with so much eagerness as to lose his taste for subjects of more importance.

The development of the young prince had advanced in the most gratifying manner, and his character had become, as it were, transformed, to the delight of all who had known the capricious, ungovernable boy, when Fénélon, entangled in an unfortunate controversy through the envy and passionateness of Bossuet, and accused of being an enthusiastic "quietist," lost the confidence of the king and was compelled to leave Versailles, in August, 1697. In accordance with an order from the king he betook himself to Cambray, over which see the gratitude of Louis had two years before made him archbishop. It is not for us here either to discuss more particularly the contest that caused the catastrophe, or to picture the activity, fruitful in good, which Fénélon now displayed as the chief shepherd over a wide district, and the magnanimity with which he carried on the theological quarrel to its termination,—and also in respect to the influence which he exerted upon his beloved pupil after their separation, we must be brief. At first, it seemed to him, as if all possibility of intercourse was cut off. In January, 1698, his friends, the Abbés de Beaumont and de Langeron, were also rudely dismissed from the Court, and he himself appeared to have fallen into as deep disgrace that the courtiers dared scarcely to mention his name.

The appearance of the "*Aventures de Telemaque*," published contrary to his wish, made his position still worse. The plan of this work was early projected, and had been actually executed as early as 1683 and 1694; but it had suffered numerous interruptions, and its revision and completion was not made until he could no longer operate immediately upon the mind of his pupil, and he felt the necessity so much the more of aiding at least indirectly in completing the education of the heir to the throne. Respecting this production as a work of art, different opinions may be allowed, as even at the first very different views were expressed, only there can be no question that it was calculated remarkably well for the purpose which it was intended to secure. Fénélon desired to show to the future king of France how comprehensive and difficult is the question to be at one time solved, and what sagacity and strength he would need in order to escape the dangers of his pathway. Therefore he has here given him a view of royalty from every direction, in glorious prosperity and in shameful degeneracy, in a position of security and in a crisis of doubt, in the splendor of great successes and in the wretchedness of miserable escapes. He has taught him by what means a nation prospers, how much the personal vices of the ruler hinder and embarrass it, and what on the other hand his wisdom and energy, inciting and animating, directing and prompting, protecting and conciliating, can effect. He has clearly shown how much can be intrusted to the unrestrained action of the people, what harm arises from imprudent interference in the healthy movements (life-throbs) of the nation, how negligence in permitting favorable opportunities to pass unimproved, involves irretrievable loss, and how under all circumstances greatness is confirmed and sustained by wise laws. With much skill are the different departments of human activity placed before the eyes of the reader in living pictures, while important instruction is interwoven respecting agriculture, industry and commerce, the arts of active life, public instruction, and the relations of nations. In like manner it is made evident how easily even the wisest king may be deceived, and the most just be lead into injustice and cruelty; how the tyrant builds his own dungeon and his own suspicion breeds suspicion around about him; how a king must atone for every act of wrong more grievously than other men; mistakes committed are sometimes not followed by increased sagacity; how often he groans for deliverance from the yoke of unworthy favorites, and how absolute rulers are often impotent, and the greatness of the splendor that surrounds them does not equal the greatness of their responsibility. In addition to all this

there is much general instruction in regard to the conduct of life,—respecting presence of mind and firmness in the midst of danger, respecting secrecy, the sophistry of the emotions, allowable pleasures, the subordination of every inclination to the requirements of duty, &c. Fénélon was greatly misunderstood when it was sought to discover in these descriptions a malicious satire upon Louis XIV, and his reign, and it has been labor wholly lost to search in even a single particular for any reference to the men and things of that time. The first publication containing special explanations of this kind was that of Ph. de Limiers, Amsterdam, 1719, after which, similar ones appeared in Germany. But, in truth, Fénélon had unconsciously drawn in his descriptions from what he had seen and experienced, and, as he had no intention of publishing his work, had without hesitation, and decidedly, expressed whatever seemed to serve his educational purpose. The greater at that time the dissatisfaction in France and Europe under Louis' government, and the more seldom hitherto any critic had ventured to remark upon it, the more welcome was this book of a man so distinguished, which seemed to do justice to all parties and to encourage to bolder censures. This work has also without doubt developed a propensity to deduce from antiquity, where hitherto for the most part only models had been sought for oratorical and poetical exercises, political ideals also, and then to apply to them the circumstances of the present, and in the dissatisfaction enhanced by this very means, to see in so much the clearer light, the heroes and regulations of antiquity. The suggestions in this respect given by Fénélon have continued in operation through the entire eighteenth century, which has held fast to classical studies for this reason, especially that he commended them so strongly. The history of the book, the numerous editions through which this "*Game of Princes*" had passed, the translations by which other nations have made it their own, the imitations to which it has given rise, could be made the subject of a very extended article which would also be a historical review of its purely pedagogical usefulness, and very instructive. The first really correct and complete edition, appeared after the author's death, in 1717, and showed the carelessness of the first impression which was printed contrary to Fénélon's wish, and by dishonorable means. But this issue had already wrought an astonishing result, and procured for the author the wondering sympathy of Europe now armed against France in the Spanish war of succession.

During this war, Fénélon displayed in the cause of France the most noble energy, and gave his counsel, repeatedly under the bit-

terest affliction, in the most faithful manner, to his pupil, now grown up and proving his abilities as general in the field. When the death of the dauphin, in 1711, placed the duke of Burgundy, next to the throne, Fénélon, with the dukes de Beauvilliers and de Chevreuse, endeavored to prepare this most nobly disposed prince for the government of the kingdom, now greatly exhausted and waiting his accession to the throne with ardent longing, by the most full and comprehensive counsels. But in the midst of the afflicting events that desolated the royal palace, the prince also sunk in sudden death, February, 1712. Fénélon, pierced to the heart,—the life and death of the duke of Burgundy were in fact the life and death of Fénélon—withdrew from the world and directed all his thoughts, all his desires to the peace of eternity. In the latter part of August, 1714, the faithful Beauvilliers passed to the tomb. With the entrance of the new year, Fénélon himself was taken sick—on the 7th of January, he closed his richly jeweled, well tried life. He died, says the Duke de St. Simon, "in the arms of his friends and his clergy; mourned by all his diocese; equally lamented by catholics and protestants. To complete his elogium, he left behind him neither debt, nor money."

THE EDUCATION OF DAUGHTERS.

"While, the education of boys is considered a work of the highest importance," it is said, "it is not necessary for girls to become learned; it is their part to manage the household and obey their husbands." It is true that as they are not destined to govern the State, carry on war or minister in sacred things, they may dispense with the accurate study of subjects connected with politics, military art, jurisprudence, philosophy, and theology; many of the mechanical arts are also unsuitable, for their bodies, as well as their minds, are less vigorous and more easily fatigued than the other sex. But from this natural weakness of women, comes the obligation to strengthen and support them. The duties which they have to perform lie at the foundation of all human society. It is they who regulate domestic concerns, promote the happiness of their husbands, and educate their children. We should consider too, how much influence a woman has, and that the excesses of men often spring from the bad education they have received from mothers, and the influence of other bad women upon their tender youth.

When a child has arrived at a certain age, without the proper exercise of her powers she can have no taste for matters of real importance—she will have an aversion to labor to any serious occupa-

tion. In this condition, the society of her mother, who reprimands her with severity, wears always a serious face, and seems oppressed with domestic cares, becomes disheartening and repulsive. She conceives a distaste for what is good, and sinks into indolence, which becomes an incurable habit. She sleeps a third longer than is necessary, thus rendering herself more and more enervated and lanquid. Then follows a morbid desire for shows and diversions, and an inordinate curiosity. For want of solid nourishment, this curiosity is directed towards vain and dangerous objects,—novels, plays, and narratives of romantic adventure. Such studies render her unfit for the duties of society. With her head full of heroes and princesses, what must be her disgust, when compelled to descend to the humblest details of domestic life!

The remedy for these evils must be found in commencing the education of girls in their earliest infancy; for it is then that the deepest impressions are made. Before they can speak, they are learning a language, which they will soon use with more correctness than can be obtained by the ripest scholars in the study of the dead languages. Now, the process of learning a language is not merely committing to memory many words, but learning the meaning of each word. The infant observes of what object each word is the sign, and though its mental constitution gives it a wonderful facility of impression from external objects, yet steady attention must be requisite, to distinguish each object by its proper name. They begin, too, at a very early age to seek those who gratify them, and to avoid those who restrain them. They know when to cry and when to be silent, in order to attain their wishes. It is therefore in your power to inspire in them a desire to be with virtuous persons. You may by the tone of your voice, the expression of your countenance, teach them to love and desire what is good, and to fear and hate what is evil, and by this prepossession, render the after practice of virtue more easy.

The health of children should be promoted by great regularity and simplicity of diet; every thing that tends to rouse the passions should be avoided, and they should be deprived of things for which they are too eager, that they may not too confidently expect to attain all their desires.

Instruction should not be pressed on the infant mind, but when the reasoning faculty is developed, each word should tend to make them love truth. We should avoid all false pretenses for the sake of appeasing them, or inducing them to obey. Children are often spoiled by being encouraged to talk, and by learning that they are

frequently the subject of your conversations. Show them that your attention to them arises, not from admiration of their genius, but from their need of care, and tendency to evil. Children have many questions to ask about what they see; answer them correctly, adding little comparisons to enable them to understand your explanations. Teach them to be careful about forming judgments, and to place confidence in the counsels of age and experience. Never tire of children's questions: they are the openings which nature offers to aid the work of instruction. In answering their questions, show that they give you pleasure, and you will be able to teach them without formal study how the work of life is carried on, the ordinary price of articles in daily use, information lying at the basis of economy and of special use to females.

As children are apt to imitate, we should place before them none but worthy examples; yet, as they can not fail to see some improprieties and follies, we should show them how despised are those who yield to their passions, and make them observe in another, the virtues we desire to see in them.

It is often well to use indirect instruction as less wearisome than formal lessons. Speak to a third person, in the presence of your pupil, of those subjects that will interest her; answer her questions promptly, and permit her to propose them in her own way, and mingle instruction in her sports. If you permit her to form a sad and melancholy idea of virtue, and to picture vice and irregularity under a smiling aspect, all is lost. Teach her that piety does not cause the defects of good people who are disagreeable; and do not endeavor to hide your own faults rather than show her an example of correcting her faults by correcting your own. As far as possible make duty agreeable, show her the utility of what you teach, and its necessity in the intercourse of life. Never assume an austere manner; rather gain the affections of children, let them be free with you and not fear to show you their faults. Confidence is of more use than rigorous authority. If the wise man recommended to parents to keep children in subjection, it was not his design to condemn a gentle, patient, mode of education; he censures only those, who seek rather their own amusement than the good of their children. Parents should preserve authority to enforce obedience, but it should be used only when all other means are unavailing. Never reprimand a child in the first impulse of excited feeling, if irritated yourself, she sees that you act with passion, and you are in danger of losing your authority; and if the child is in ill humor, she is not in a fit state to overcome her passion, or to appreciate your advice. Speak of but

one fault at a time, and always suggest means to overcome it. We should not threaten often without punishment, but yet we should inflict punishment less frequently than it is threatened. As far as possible mingle the useful with the agreeable, imitating the ancients, who, through the medium of poetry, taught the principles of science, the maxims of virtue, and refinement of manners. Impose as few formal tasks as possible; a vast variety of information may be given in familiar conversation. Inspire in your pupil a desire to learn. Tell her some interesting story, show her the books from which you have taken it—let it be handsomely bound, well printed, and with fine pictures, a book of short and wonderful stories. When she begins to read, do not require accuracy, but let her pronounce just as she speaks. A similar method should be used in teaching her to write. When she can read a little it will amuse her to form pictures and letters. Encourage her with some simple reward, say to her, "write me a note," "write your brother a little note and tell him this or that."

Observe and avoid the great defect of education; all the pleasure is connected with diversion, all the fatigue with study. Change this system. Disguise study under the appearance of liberty, and permit little sallies of gaiety for recreation. Excessive strictness is very injurious, though instructors aim at regularity because it is more convenient for them than to be on the watch for opportunities. It is the feeling of constraint, disgust, and weariness, that strengthen the desire for amusement. If a daughter were free from ennui in her mother's society, she would not feel so strong a desire to seek less innocent companions.

Children desire amusement; but all amusements of an exciting kind—plays with boys and girls or with girls who are not deserving of the utmost confidence, frequent absences from home, &c.—should be prohibited. Some simple sport, a walk, an innocent conversation will impart an equable and lasting pleasure, and it is our duty to accustom those under our charge, to this simple life.

The greatest difficulty in education is met in those children who are deficient in sensibility. If you foresee this evil do not press upon your pupil a series of instructions, or fatigue her with excessive regularity and system; rather enliven and divert her. Do not fear to use even the aid of emulation and give her an occasional victory over those of whom she is jealous; in short, treat a child wanting in sensibility as you would treat a sick person, indulging some fancies even at the price of regularity and order. Call in the aid of friendship and train her affections so far as possible towards those who can aid you, in attracting her to what is good.

An opposite fault is that of having the feelings excited on trivial occasions. Some children can not see a quarrel but they must take side, and are full of causeless partialities and aversions. They will learn from experience to correct this error, but we should show them that, in all we love or hate, there is a great mixture of good and evil, and thus we may diminish the violence of these fondnesses and dislikes. Never reward children with articles of dress, or delicacies for the palate. Introduce as few rules as possible, giving usually some reason for doing a thing at one time and place rather than another. Though praise may tend to promote vanity, we must use it with moderation, together with some harmless reward such as a walk, or a little present of a picture, medal, or elegant book.

Children are fond of stories. Take advantage of this inclination, relate to your pupil little stories and fables, and point out the moral. Tell her some pleasant story from history and enliven the narrative with sprightly tones, introducing all the characters and deferring the close of the narrative till the next day adds to the interest. Do not give this the appearance of a task, and if the child wishes to repeat what you have told her, let her do it in her own way, and without correcting her. After she has become accustomed to this exercise, point out to her that the best method of telling a story, is to render it short, simple, and natural, by the choice of such circumstances as best represent the fact. If there are several children, let them represent the characters whose stories they have read, which exercise will impress the narratives on their memory. Endeavor to inspire a greater relish for Sacred History than for any other, religion has its foundation in history. For example, if you tell a child that, in the Deity, three equal persons form one nature, will she conceive the meaning? But tell her that, when Jesus Christ came up from the waves of the Jordan, a voice was heard saying, "This is my beloved Son," and at the same time, the Holy Spirit came down upon the Saviour, in the form of a dove, and she will clearly discover the Trinity. This mode of teaching history though it prolongs the process, really abridges it. It is the system recommended by St. Augustine, and was the system and practice of the church. It consists in showing by history, that religion is coeval with the world—Jesus Christ, foretold in the Old Testament, and reigning in the New, is the summary of Christian instruction. Remember to impose on them no obligation to listen to these stories—trust wholly to the attraction of pleasure. Illustrate where you can with engravings and pictures.

The first exercise of childish reason we should endeavor to

turn to the knowledge of God. At first, follow the Scripture method, forcibly affect their imaginations, representing all truth under the garb of images. Teach them the nature of the soul, that death is not annihilation, that we are but pilgrims here, and after death will live again. Show them that miracles are not impossible with God, and that nature is but the ordinary system under which He works. Show them how their own frailties are the result of Adam's fall, and turn their thoughts to the Saviour, who reconciles God and man. Let them read the gospels attentively, cultivate a sober and temperate wisdom, fear the enticements of novelty, and, while they aspire after purity for themselves, banish all thoughts of presumptuous censure and reform. Guard them against superstition, and, as they advance in years, against erroneous opinions in theology. While cherishing a wish to understand the ceremonies of religion, form their taste for those simple sermons which explain the true meaning of Scripture, and for that church whose pastor speaks with feeling, even if destitute of talent and power, and at the same time exhort them to be charitable to all denominations. Accustom them to the thought of death, to look without terror on a pall, or an open tomb, and to laugh at vain, pagan superstitions about dreams, spilled salt, thirteen at table, &c. The soul of Christianity is contempt for this life and love for the other—they should regard the life of Christ as our example, and His word as our law. Show them the decalogue as God's law, but that external rites are useless, unless the heart is in them. Explain the sacraments, showing them the happiness of being members of Christ, the need of divine grace and the efficacy of prayer.

Great care is needed that the softness and timidity, in which girls are usually educated, do not unfit them for acting with firmness and resolution. In those groundless fears and ready tears, which they use so freely to gain their ends, is much of affectation, and much power of habit. Contempt for the affectation is useful in their correction. Their too tender friendship, their little jealousies, their flatteries, eagerness in the pursuit of some pet object, should be repressed and controlled. They should study to converse with conciseness and precision, to say much in few words. They should learn the difference between true and false prudence, and that one may without deceit, be not only discreet and cautious, but diligent in using all lawful means of success. Be lenient to little frailties, and early seek a remedy for extreme diffidence. Always censure ingenuity in the practice of deception, and manage so that all artifices may fail of success.

Vanity is the besetting sin of girls. The paths which conduct men to fame and influence being closed to them, their whole attention is turned to the culture of graces of mind and person, and a ribbon, a cap, the position of a curl, become very important matters. The continual change in fashion, the ambition and vanity shown in dress and furniture are often the ruin of families; and the ruin of families involves corruption of morals. Show your pupil the transitory power of beauty, how a few years is all the difference between a beauty and a plain woman. Let them study neatness, decency, and propriety, remembering that dress can not confer beauty. If they will listen to the conversation of painters and those whose taste is founded on models of antiquity, if they will notice the noble simplicity of statues of Greek and Roman women, they will learn to submit to fashion, as to a tiresome servitude, to which they yield only a limited obedience. Point out to them the rules of Christian modesty, repress all whims and lofty notions, and permit nothing in the exterior of young ladies which is above their station. Girls should also be undeceived as to their ideas of wit and genius, they should not speak unless there is a necessity for it, and then with an air of doubt and deference. Let her remember that memory, vivacity, and pleasantry, they may possess in common with many others, but an equable, well-balanced mind will distinguish them from their sex, and that ennui and disgust are the weaknesses of a disorded mind.

Women are intrusted with the education of their children, the charge of domestics, the details of expenses and, not unfrequently, the management of business, and the disposal of property. Their instruction should therefore be confined to these appropriate duties. An inquisitive woman will object to these narrow bounds, but she is by no means aware of the extent and importance of what I propose. A mother needs no small discernment to know the character and disposition of each of her children; what prudence must be hers; what penetration into the character of those to whom she intrusts them! A mother of a family has need of a mind discreet, resolute, arduous, and skillful in government. Connect with this the charge of domestic economy. It requires a higher mind to guide the affairs of that little republic, a family, than to play, talk about fashions, and to be accomplished in all the prettinesses of conversation. But warn your pupils to beware of avarice. It is from a good system, and not from sordid savings, that great advantages arise. Regard neatness; accustom them to have nothing unclean or in disorder, but to keep everything in its place. But be careful

that neatness do not degenerate into littleness of mind. Good taste rejects excessive delicacy; cultivate only that neatness which is simple and easily practiced, and a contempt for a passionate care for trifles; and while you show them the best method of doing this, teach them still more, how to do without them. It is well to accustom daughters early to the management of domestic affairs. Repose confidence in them, letting them share in the management of important concerns. Queen Margaret relates the great pleasure she felt, when first allowed to share the confidence of her mother and the Duke of Anjou, respecting state secrets.

Let young ladies be taught to read and write correctly. They should also understand the grammar of their own language, at least, so far as to be able to speak it correctly, and to teach their children. They should likewise understand the four rules of arithmetic and put them in practice by keeping accounts. Something too of the fundamental principles of *justice;* as for instance, the difference between a legacy and a donation, the nature of contracts, the laws and customs of their own country, the nature of civil society, difference between real and personal estate, and that skill in the mangement of business which consists in foreseeing evils and knowing how to avert them. Young ladies of birth and fortune should be instructed in the peculiar duties of landed proprietors, how to prevent abuse and violence, establish schools and charities, and diffuse among the people useful and religious instruction.

After these studies, may be permitted the histories of Greece and Rome, and of their own and neighboring countries. The study of Spanish and Italian is worse than useless—Latin has more claims, being the language of the church. I would permit the perusal of works of eloquence and poetry. Music and painting too, though their pursuit may be attended with danger, can never be entirely neglected. Painting is of special use in connection with embroidery, as an occupation for the minds, as well as the fingers, of ladies of quality.

In conducting the education of a young lady, it is very important that we consider her station in life. If she is to live in the country, do not permit her to form a taste for city amusements; and, if she hold a moderate station in the city, beware of introducing her to higher circles, but confine her desires to her own sphere in life.

In conclusion—the path pointed out, however long it may appear, is still the shortest; the opposite path, that of fear and a superficial culture of the understanding, though it may seem short, is very long. In many cases it is only necessary to avoid placing children

under constraint to give them proper attention, inspire them with confidence, answer their questions in an intelligible manner, give scope to their natural dispositions, and correct their faults with patience. It is unreasonable to expect that a good education can be conducted by a bad governess, or even by a good governess, without the co-operation of parents.

That beautiful discription, given by the wise men, of a virtuous and accomplished woman, teaches us to admire in her simplicity of manners, economy, and industry. "Her price is far above rubies, the heart of her husband doth safely trust in her." "Fear is deceitful, and beauty is vain; but a woman that feareth the Lord, she shall be praised."

V. SUGGESTIONS ON FEMALE EDUCATION.

GERMAN AUTHORITIES.

It is an evidence of the corruption or of the over-refinement of female education, that far more care is bestowed upon the art of outwardly pleasing, than upon the cultivation of inward good qualities.

Thus we see young women at great pains to adorn themselves, wherever they have an opportunity to be seen; but all the careful order and neatness of their costume is mere artifice; and not an expression of their actual character

They learn dancing and music, foreign languages, all to make an impression on strangers in society; to excite astonishment; but to establish and maintain unity and love amongst all the members of a household, by humility, courtesy, childlike attachment, judicious treatment of servants, a kind indulgence to the weakness of others, and encouragement to doing good, is an art unknown to them.

They read books, study works of art, attend plays, chatter about scientific affairs, and know how to be witty and to say cutting things; but in their own homes to comfort those who suffer, to make up for deficiencies, to be content with a little, to do nothing for themselves and all for others, and quietly but efficiently, voluntarily, without bustle, to give new attractions to the uniformity of the quiet life of home, the art of doing this is unknown to them. And yet it is here that their true sphere of greatness lies.

In learning, wit, artistic knowledge, in everything which is the business of a man, man can surpass her.

The more a woman departs from that sphere of activity which nature has designed for her, to shine upon the theatre of masculine action, so much the more does she lose her natural grace, and become intellectually ugly. ZSCHOKKE.

For scientific education, so far as this belongs to girls, instruction by a man is best. For how entirely different, how much clearer and deeper are the perceptions of the masculine mind!

The delicate feminine feelings can be developed only in a woman.

All girls taught among boys by men, retain all their lives more or less of an unwomanly character.

Women who grow up under the care of women only, as in convents, or in very large boarding-schools, are liable to pass entirely under the dominion of feminine littleness, from which they never escape.

Men who live long, or always, without the beneficial influence of the female sex, are punished for it by the infliction of the most wretched pedantry. This is the revenge of insulted nature.

CAROLINE RUDOLPHI.

Awakened from this dream,
What is left to me of this angel?
A strong mind in a weak body;
A hybrid between man and woman;

Unfit either for dominion or love;
A child with the weapons of a giant;
A creature half way between a wise man and an ape.
Who, in order to crawl painfully along after those who are stronger,
Has fled away from the proper beauty of her sex;
Who has also submitted to be cast down from a throne,
To lose the charm of the sacred mysteries in her keeping,
And to be stricken out of Cytherea's golden book,
All for the sake of the approbation of a newspaper!

SCHILLER. (*Poem.*)

Said a king to his son, "Be diligent
In learning all arts, in acquiring all manner of knowledge.
If you come to need then, they will be your capital;
If you do not, they will always be accomplishments.

RUECKERT. (*Poem.*)

Girls are destined to become prudent and economical housewives, and the faithful helpmeets of citizens; and as mothers, to have charge of the first education of their children.

For these domestic and civic duties they should be educated, from childhood up. ARETIN.

Of the moral qualities which education should always aim to cultivate in the young, there are some whose development we feel to be especially appropriate to the female character; such as softness and tenderness of feeling; depth of sensibility; mildness; pliability; patience; self-forgetting and self-sacrificing love; contentment; and submission to limitation within a narrow sphere; a quality the most important of all.

But as these qualities border upon many faults, such as excessive excitability and variableness, irritableness and willfulness, passion, pretentiousness, coquetry, envy, detraction, injustice, talkativeness, meanness, and indolence, these tendencies should be allowed to indicate objects to be sought by education; and the following principles in particular should be established:

1. The education of girls should, from their childhood up, be a preparation for their future duties. Playing with dolls is proper for their younger years, and after that, they should be made acquainted with household work.

2. They should of course be therefore trained to industry and economy; which are under all circumstances prime virtues for women; and also

3. In domesticity; which nothing will better teach, than the mother's example.

Too frequent visiting and going out with companions of the same age, however innocent, gives girls a habit of chattering about nothing, and makes them afraid of work, lazy and disorderly, and inclines them towards dissipation.

But there is nothing more useful as a means of moral training, than judicious familiar intercourse with high-minded and intelligent men and women. This is a protection to feminine virtues, and instructs in the real tone of good society, far better than idly frequenting the ordinary heartless and mindless circles. In domestic life, where they are much more secure from the foolish flatteries of superficial youths and men, they will learn practically the virtues of accommodation, patience, perseverance, contentment, subordination, etc.

4. Education ought not to destroy the desire of pleasing, which is natural to women, but to keep it pure and to elevate it. To this end it should be deeply impressed on their minds, that unfeigned good will, un-

assumingness, good nature without being undignified, simplicity, good taste, and gracefulness in speech, attitude and movement, are all attainable in proportion as no direct effort is made for them.

5. Since it is the lot of the female sex to make others happy and to be made happy, by love, education must teach them to set the greatest value, not upon external beauty, which fades in a few years, but upon such lasting virtues as endure under all circumstances; upon mental beauty.

6. As the duties of the housewife and mother require many sorts of mechanical labor, sometimes alone and sometimes in the family circle, her instruction and education should be adapted to give her mind activity and regularity, and the habit of reflection even upon the smallest matters. She should also however learn to live with reference to others than herself. Instead of permitting herself to be absorbed in silent fancies and reveries, she should be conversable and sociable, cheerful and joyous, and should bring cheerfulness and pleasure into life, so often troubled and burdensome.

Elaborate intellectual training, half-learning, ingenious reasoning on such matters as their husbands are concerned with, does not promote a husband's happiness, but rather interferes with it; often occasions others to admire her more than he does; and leads to vanities and errors of all kinds.

But quick intelligence and a modest desire for information, "which gladly hears when acute men are talking, and takes pleasure in understanding them," a genial manner of discussing affairs, and the display of real sympathy with others, will be a source of pleasure to parents and to companions, and afterwards to a husband; and will animate the social circle of every house in which exists a real family life.

While the husband and father feels care, both within and without the house, it almost never leaves the wife and mother, who does her duty; and often increases with advancing years, with every increase of household and family. With reference to this state of things, piety, which gives resignation and faith, is infinitely valuable.

Even an unbeliever respects real religion in a woman; for it often moderates the impatience and anger of a husband, gives that meek and quiet spirit (I. Peter, iii; 4,) which is of great price not only before God, but before man; and which is so often able to avert even the stormy violence of wrath and passion.

Such religion, if only it remains free from devotion for mere show, and from metaphysical speculation or that visionary exultation which is often nothing but disguised over-sensibility, is a most valuable possession, which parents can not be too early solicitous to secure to their children, and which they may perhaps be able also to hand down to their grand-children, and to render a permanent family trait.

But if irreligiousness gets possession of women, the prospects for the education of their children are much obscured. NIEMEYER.

For girls, domestic education should be as stringently insisted on, as public education for boys.

Girls' schools are the very worst means; only to be used in case of absolute necessity, and when private education within the family is quite impossible.

When it becomes absolutely necessary that part of the education of girls should be given outside of the family, this external education ought not to have any influence upon the development of the disposition.

This portion of the education should proceed, for girls, wholly within the family; so that any education to manual skill, given outside of the family, should not occupy too much space, for fear of making some unde-

sirable impressions, which may weaken the influence of the family on the disposition. SCHLEIERMACHER.

Errors and failures in the education of girls can only be made up for with great difficulty.

The independent power of the masculine mind can regain its purity, after error; but the more sensitive and plant-like nature of girls loses its proper growth forever by one injury.

Hence arises the educational rule, with boys to seek to strengthen their power of independent exertion for the struggle with the world; but with girls, to preserve their susceptible natures from evil impressions, and the pure tone of their minds from being untuned.

Therefore fathers and educators should avoid all coarseness, harshness and rudeness in the presence of female pupils; and to give no shocks to those feelings which pertain to the department of exterior observances, in which it is the special privilege of the female sex to govern, and to exercise a very stringent dominion. BAUR.

For house and family, the husband is everything.

But within the house, within the family, the wife is all; she is the inspiring, embellishing and controlling power.

Man acts in the outer world.

But for woman, the representation of that world on the stage is a recreation in her moments of leisure.

Home is the central point for all the exertions of the man, how various soever in direction; for home he traverses, searches, conquers, all the world.

But the wife rules by goodness over the sanctuary for which man has exerted his powers; she is the economical preserver of the treasures which he earns.

Man, surrounded in the outer world by deceit and hatred, often forced by circumstances to conceal his real nature and to seem other than he is, finds again in the love and naturalness of woman, himself and his own natural character.

Naturalness is woman's most beautiful ornament.

Upon this depends her wise attractiveness, and her tender love of family life.

Everything assumed, forced, artificial, displeases; is dead outside paint; and indicates that something disgusting is behind it.

As the child pleases by innocence and truthfulness, so does the maiden, the wife, the matron, by simple, modest, loving, cheerful, childlikeness.

Though her exterior changes, yet her soul shall preserve everlasting youth.

Nature has taught her to love; has taught her the duties of wife and of mother.

She will always remain a true pupil of nature, down to the latest times.

What is foreign to her real destiny, she must remove as unnatural.

But it is the chief fault of female education, that girls are even more than boys, educated to untruthfulness, pretences, and dissimulation.

We seek to root out of them the natural, unpretending simplicity and loftiness of their innocence, and to supply its place with a feigned nature. ZSCHOKKE.

Loveliness belongs to women.

Even its bodily manifestation is the glory of womanhood.

Only the delicate mental character of woman can cherish the feelings, impulses and tendencies, which exist in her, and the beautiful appropriateness of the numerous phases of her character; and only her delicate

frame can permit these easy and unrestrained motions which in graceful persons so much delight us.

Physical beauty excites desire; loveliness, intellectual pleasure.

Happy in itself, it causes happiness in others.

An imperious woman may detain us for a moment; but we are never weary of waiting near a lovely one.

Beauty departs with the fresh bloom of youth; loveliness shines even among the ruins of age, with an indescribably delightful brightness.

Beauty is for the eye alone; loveliness rather for the heart.

Purity and goodness are the essential constituents of loveliness.

Out of its clear and peaceful eyes looks an unspotted heart, unconscious of any wild passion or inner rebellion. EHRENBERG.

Only in cities, where men pervert nature and the natural order of things, making man womanish, and turning night into day, and among universal corruption, do we find it not surprising that women become mannish, pursue literature, and consider themselves better fitted for the admiration of society than for the quiet of the domestic circle.

There it is thought admirable for maidens to become remarked for making conquests; to be well read in romances; and to act romances; while they waste the substance of their parents by their expenses, and repay their blind affection with shameless disobedience. There it is thought admirable for mothers to be more devoted to public amusements than to their children; and for wives to belong more to other men than to those to whom they have pledged their faith. And there it may be very proper for women who have grown too old for such luxurious follies, to end by becoming devotees or intriguantes. ZSCHOKKE.

Early let woman learn to serve, for that is her calling:
For by serving alone she attains to ruling;
To the well-deserved power which is hers in the household.
The sister serves her brother while young; and serves her parents;
And all her life is still a continual going and coming,
A carrying ever and bringing, a making and shaping for others.
Well for her if she learns to think no road a foul one,
To make the hours of the night the same as the hours of the day;
To think no labor too trifling, and never too fine the needle;
To forget herself altogether, and live in others alone.
And lastly, as mother, in truth, she will need every one of the virtues.
GOETHE.

In educating girls, the mode of instruction required is entirely different from that which is proper for boys.

The latter, by reason of their natural tendency to lawlessness, must be early brought under discipline, sent to school, accustomed to regular mental labor and to obedient subjection to regular rules, as is required by the future lives and duties of men.

On the other hand, as Fenelon says, "a too pedantic regularity, which requires incessant study without any intermissions, is very injurious to girls."

A definite daily order of exercises should be prescribed to girls to be strictly followed.

But they must from childhood up be accustomed, whenever it is necessary, to leave their book or their piano, to take care of some little child, or to be of some assistance to their parents.

Such interruptions can not of course be put down in the order of exercises; they are exceptions to the general rule.

Then, after doing these kindnesses, they should return to their work and read or play on as quietly as if they had not been interrupted.

This species of discipline should teach them to love not merely with words, but in deed and in truth. Goethe says, "By such services they attain to ruling, to their proper power in the household."

Von Raumer.

In order to avoid one-sidedness and defects in female education, it must not be without female influence; for male instructors are liable to influence girls too much towards their own character, which may result in losing the delicacy of the feminine character, and in the acquisition of some traits of an inappropriate kind.

Still, the supreme direction of the education of girls should be in charge of a man. Baur.

Inspiriting music, breathing courage and boldness, is proper for men; but that which imports moderation, mildness, modesty, for women.

Plato.

The principle that children should read nothing bad or vulgar, admits of full application to music.

For if they have from an early period only heard, sung and played what is good, it will become a second nature to them, as their sphere of vision enlarges with their growth to flee from all bad music, and to like what is beautiful and good, in whatever form it may appear.

The case is far otherwise with very many who have had the ill fortune from their childhood to hear and practice and live in associations with bad music only. It is very uncommon, and very difficult, for such persons to bring themselves back from their impure music to that which is pure, to cure themselves of their seated habits, and to accustom themselves to such music only as is correct and beautiful. Von Raumer.

Music is on some accounts a dangerous study.

If a painting containing a mis-drawn limb, or anything immoral, a correct eye will find abundant grounds for criticism; or shame, at least in the presence of others, will direct the observation elsewhere.

But everything impure, unnatural, immoral, may creep into music; and thus we may look plainly and fully at what we should for decency's sake be obliged to turn away from if presented by the pencil or by words.

Plato wrote in opposition to immoral music. What would he have said if he could have witnessed the misery which we have now-a-days to endure from our present music, so unnaturally composed, so excessively feeble or wild or amorous, and yet so seldom rising to true fire and energy.

In music as now too often employed in education, we find everywhere art and ornament, a mass of wonderful difficulties, overloading instead of feeling and clearness; but after subtracting what is to be attributed to the gratification of the composer's vanity, we have left very little that gives us hope or pleasure. And accordingly our young ladies, as soon as they have a home of their own to live in, usually fling all their artistic music, with delight, to the winds.

Music will only seem divine to us, when it carries us into a state of ideal sensibility; and the musician who can not do this is nothing but a mechanic—nothing more, even, than a vulgar hod-carrier.

Healthy feeling is never confused, nor does it go beyond self-control.

Your favorite symphonies, fantasias, pot-pourris, &c., are often the most ridiculous stuff in the world. They begin with some passage full of mystery; then comes a volley as if of artillery; then a sudden silence; then an unexpected waltz-movement; then, just as this begins to be inspiriting, an equally sensible and sudden plunge into a passage full of depth and melancholy; then into a furious storm; then, out of the middle of the storm, we are presented, after a brief pause, with some mere trifling,

and lastly with a finale in the nature of a hurra! and then everybody gathers around with cries of delight.

Such things please, it is true; but how?

But the worst thing of all is, that under the favorite name of "effects," we find the most destructive and poisonous matter recommended; especially such convulsive, distorted, extravagant, astounding, raving confusions of sounds, as excite everything evil in man.

If many of our virtuous maidens knew what that music is which they often have to hear, and even to sing and play, they would perish with shame and indignation. THIBAUT.

The house should be free from unpleasant pictures, and from ambiguous or wanton ones. It should, on the contrary, be adorned as much as possible with such as are pure and beautiful; whose silent, but ennobling and constant companionship will be found to exercise upon children an immeasurable influence for good.

Girls particularly, should from an early age be allowed to amuse themselves with pictures of celebrated works of art, churches, palaces, galleries of painting, &c.

Productions of art make deep and lasting impressions, even upon the minds of children.

But all premature criticism on such subjects should be avoided, for fear of affected admiration and pert foolish fault finding.

A silent and natural examination of works of art, where the beholder "forgets self and the world, and lives in the objects only," is the true one; and can not do harm.

Girls should learn drawing chiefly for the sake of practising at home. The teacher should pay especial attention to drawing from nature; and should use copying as a mere technical exercise.

Such instruction, but above all, the quiet and intelligent study of the works of great masters educates girls to the love of what is beautiful and good, and to disgust at what is ugly and bad. This love and disgust will have much influence even upon their daily life at home; for their eyes when thus trained, would quickly detect anything inconsistent, untasteful or misplaced about them, and would never be at ease until it was corrected.

Botany, as a science in the masculine sense, is not a proper study for girls.

Girls should rather be trained in the direction of art. They should look upon flowers, not as an analyzing botanist does, but as a sensitive flower-painter would.

The love of girls for flowers is to be cultivated; they may tend them most carefully, and follow their development from their first sprouting up to the ripening of the seed.

This pleasure in flowers is like the pleasure that girls find in taking care of domestic animals, lambs, poultry, pigeons, &c. VON RAUMER.

The gods have destined and fitted the nature of man and woman for society; in that not each of them is capable of everything, but that each is suited for that in which the other is deficient; in order that both together may fulfill a complete destiny.

The one is stronger and the other weaker, that the timidity of the latter may make her more prudent, and that the strength of the former may make him a protector.

The one procures what is needful without, and the other takes care of it in the home.

The woman is weaker and better fitted to a sedentary life and can not so well endure wind and weather.

Man can not so well bear quiet and stillness; and movement is natural to him. ARISTOTLE.

The principal duty of woman, as well as the peculiar sphere of her efforts, has been much more distinctly defined by nature than that of men, whose sphere of activity is out of all comparison wider and more various.

Man needs to develop all the infinite endowments of his nature; to gradually bring into activity all the perfections whose germs slumber within him; and to make use of all these powers in all the relations and changes of life.

But how much more limited is the sphere of the activity of the other sex!

The destiny of the young girl is, to be a wife and a mother.

The wife must live for her family; must watch over its property; must thus have special charge of the ordering and management of all little matters as they come up; and above all, must nurse, or at least watch over and take care of the children to whom she has given birth, until they can take care of themselves, and have become so far educated and independent by her example and her teaching, as not to need her protection. This period is earlier reached by sons, who receive their education from the world, than by girls, who usually go from their mother's care into the charge of a husband.

The bodily organization of women in part prepares them for this sphere of duty; as do also the mental endowments and powers of that sex; the perfectibility of which clearly shows that woman as well as man belongs to a higher race of beings.

The cultivation of their understanding, judgment and reason, in part by studies of a generally useful character, in part adapted especially to the needs of the sex, should be the main purpose of their education.

Learning, properly so called, is useless to them, and commonly injurious.

The education of the sense of beauty—of the taste—is only harmful when it is made the principal object.

As the cultivation of the taste is closely connected with that of the fancy and of the feelings, it must be conducted with the extremest care; and the materials for it must be chosen with the utmost caution.

Most of our novels and plays, and very many poems, can be used in education only with the greatest risk.

The languages, the native language in particular, are a valuable means for educating the mind, and this the more because the study of them will act as a preservative against an unhappy tendency to read indiscriminately all manner of German books; and because only the best foreign books will be read.

Geography and history should be not mere lists of names, but should be shown to be rich in great deeds and great men, the knowledge of whom will elevate the soul, and will prevent from seeking after foolish novelties.

Music, singing, drawing, rightly studied, will excellently occupy many hours; will keep the student at home, and are capable of being brought into a useful harmony with the moral feelings.

Intercourse with intelligent men is a far more certain and effectual means of cultivating the mind, than reading books. The latter is of but little use in cultivating the understanding; and we often find persons of extensive reading, who are quite destitute of comprehensive ideas, and are unable to carry on an intelligent and connected conversation.

That all this may be accomplished—at least among the educated classes—without derogating from the most faithful fulfillment of all the womanly duties, has been so often proved by experience, that it can no longer be pretended that girls must devote all their lives to sewing, washing, cooking and nursing children. All these things should be understood and done; but it is degrading the female sex to set it down as fit for these things only. NIEMEYER.



G.A. Menzel's Lith. Cin.

OHIO FEMALE COLLEGE, COLLEGE HILL, O.
6 miles from Cincinnati.

VI. THE OHIO FEMALE COLLEGE.

AT COLLEGE HILL, OHIO.

The Ohio Female College, is the oldest of a class of Seminaries of learning that have sprung up in the Western States within the last few years of very marked peculiarities and characteristics. They have not yet assumed their adult form; but their youth is one of great promise and of most commanding interest to every Christian philanthropist. They have worthily taken a new family name—Female College—a name, if not to be preferred before any that a classic genius might invent for them, is significant and has become now too firmly rooted in use to be extirpated. They aim to furnish to the young women of our land a truly "liberal" culture, equally thorough, complete, and worthy of the name of "liberal," as that furnished in our best colleges for young men, although of somewhat different style. The education they offer is not, indeed, that which will best fit for the bar, the forum, the pulpit, the public walks of life; it is shaped, rather for the domestic sphere, that in it there may be the light and cheer and wholesome air of solid learning, and refining art, of invigorated, enlarged, and furnished intellect, of generous and refined sensibility, and cultivated manners; in short, a genuine Christian culture.

The Institution was opened under this name on Thursday, the fifteenth day of September, 1849. On the nineteenth day of February, 1851, it was incorporated by the legislature of the State of Ohio, under a special charter conferring the amplest powers and privileges of a close corporation. Hon. John McLean, of the United States Supreme Court, was the first President of the Board of Trustees, and continued in this office till his death.

The site selected for the College was on the highest and most commanding of the several elevations overlooking the city of Cincinnati, and the Ohio River in its vicinity—since called College Hill. The site is five hundred feet above the river at low water; and as the ground falls away somewhat in the direction from the river into the extended table-land reaching into the interior of the State, the

view from the tower of the College sweeps an horizon of fifty miles radius. Embracing a landscape as diversified and beautiful as it is extensive. With easy access to the city, from which it is but six miles distant, it enjoys the quiet and undistracting seclusion of the country, together with command of ready intercourse with all that in the life of a great city should interest the student.

The grounds first secured for the Institution embraced an area of about fifteen acres, to which additions have since been made, so that the College plot now comprises about twenty-three acres. They lie most invitingly to all the decorations of art, and are made to present a landscape of uncommon beauty and in admirable keeping with the high objects of the Institution. A botanic and flower garden and conservatory and an extensive kitchen garden are connected with them, affording ample supplies for the table as well as for the needs of study and of taste. From the beautiful artificial lake on the grounds, that covers one or two acres in surface, and is filled with living water to the depth of from two to ten feet, a hydraulic ram forces water in abundance for the supply of the *jet d'eau* in front of the main building, and to make up any accidental deficiency in the supply of rain water, on which reliance is chiefly placed for the ordinary wants of the Institution.

Four buildings were early provided for the uses of the college; one of which was designed for the chapel, the other three for dormitories and other accommodations for boarding the pupils from abroad. Provision was thus at once made for one hundred and fifty pupils. Of these structures the largest, erected at a cost of about twenty thousand dollars, was burned to the ground on the morning of the tenth of September, 1854.

On the same ground, another structure was at once built, far exceeding the former in size and beauty, and the character of its arrangements for the health, comfort, and good order of its inmates. This model structure is of brick, three stories high above the basement, one hundred and forty-seven feet long and eighty one feet deep. It contains ten spacious halls, and ninety-seven principal apartments. It is heated by fresh air received through a tower some twenty feet from the ground and conveyed into chambers of steam-pipes heated by steam generated some two hundred feet distant, and thence conducted through separate flues in the partition walls which are for that purpose, and for security double, and of brick, into the several apartments. In this way and by a reverse order of valves and flues for summer use, the atmosphere in all the rooms is kept ever pure and fresh, as well as even of comfortable temperature.

This method of ventilation and warming, original in much of its details, and the result of much study and experiment, has since been extensively introduced into the public buildings of the State, being recommended by its superior conduciveness to health, comfort, and security from fire, as well as by considerations of economy and convenience. Every room is lighted by gas manufactured on the premises, and supplied with filtered rain water from a hydrant in each. In addition to other accommodations, this building contains eight bathing rooms for warm, cold, and shower baths.

The course of instruction embraces two stages,—one preparatory of two years, the other collegiate of four years. For admission to the collegiate course, the pupil must be of the age of fourteen years, and be qualified to pursue with advantage the studies of the course. These are, in Science, during the first year, Robinson's University Algebra, Wilson's Universal History, and Wood's Class-Book of Botany; the second year, Geometry and Trigonometry, Plane and Spherical (Davies' Legendre,) Natural Philosophy and Chemistry, with Experimental Lectures, and Descriptive Astronomy; the third year, Physical Astronomy, (Robinson's University,) Geology (Hitchcock's,) Hooker's Higher Physiology, Guizot's Earth and Man; Paley's Natural Theology, and Alexander's Evidences of Christianity; in the fourth year, Haven's Mental Philosophy, or Bowen's Hamilton's Metaphysics, Hamilton's Logic, Hickok's or Haven's Moral Science, Day's Rhetoric, Guizot's History of Civilization, and Day's Book-keeping. A course of Latin is required in addition, in order to graduation, as well as a thorough training in elocution, and English Composition. The study of English Literature in its history and peculiarities is pursued chiefly by oral instruction and systematic exercises in connection with the use of Day's Rhetorical Praxis, and Cleveland's Compendium. The Greek, and also the Modern European Languages are optional studies. Drawing and Painting are also optional; and Vocal and Instrumental Music. In these optional branches, the desire is to provide the most complete and thorough instruction; so that there shall be furnished within the walls of the Institution the highest order of instructors and the most ample facilities for culture in all the departments of Science, Literature, and in the Arts of Painting and Music.

In Physical Culture, the system of exercise, improved and adapted to American Educational wants, by Dr. Dio Lewis, is in successful use in the college.

The religious character of the Institution is Evangelical Christian

without Denominationalism. The pupils worship Sunday morning in the neighboring church, and in the evening in the college.

The literary distinctions awarded by the Institution are the Baccalaureate Degree on the completion of the regular collegiate course of study; and the Crown-Laureate on the completion of a two years' graduate course.

The history of the college shows it to have been eminently successful. The attendance in the aggregate has averaged over one hundred and fifty each year; and the number of pupils, in actual attendance has increased for the last five or six years, since the erection of the new building in a very uniform ratio of about twenty per cent. a year. The fact, in this increase of actual attendance, of greatest significance is this; that it is owing chiefly to the increase of the average period of attendance on the part of the pupils respectively. In correspondence with this, there has been a steadily and rapidly rising standard of attainment and discipline. Although a truly liberal education for either sex must be confined to the comparatively few yet the diffusion through these few of a perfect culture penetrates the masses of society with an elevating, refining power that can not well be over-estimated.

The first graduates of the College were of the class of 1851,—two in number; in the class of 1862, there were seventeen. The whole number of graduates to 1862, inclusive, is ninety-five, of whom three are, now—May, 1863, deceased.

The whole number of pupils in attendance during the collegiate year ending June 11th, 1863, is two hundred and one, of whom, one hundred and fifty-nine were boarders in the Institution. They were from Ohio, 126; from Indiana, 41; from Kentucky, 15; from Tennessee, 6; Virginia, 4; California, 2; Illinois, 2; from Iowa, New York, Alabama, Washington City, South America, each, one.

The Faculty of Instruction for the year ending June, 1863, consists of the *President*, Rev. Henry N. Day, D. D., LL. D., and Miss Margaret H. Wallace, *Principal*, assisted by twenty associated professors, lecturers, and instructors, of whom four are gentlemen and sixteen ladies.

The period of Instruction each year, including a winter recess of about two weeks, during the Christmas and New Year's holidays, is forty weeks, beginning on the first Monday of September, and ending with the Annual Commencement on the second Thursday of June.

VII. A LECTURE,*

ON SPECIAL PREPARATION, A PREREQUISITE TO TEACHING, 1838.

BY HORACE MANN,

Gentlemen of the Convention:

After the lapse of another year, we are again assembled to hold counsel together for the welfare of our children. On this occasion we have much reason to meet each other with voices of congratulation and hearts of gladness. During the past year the cause of Popular Education in this Commonwealth has gained some suffrages of public opinion. On presenting its wants and its claims to citizens in every part of the State, I have found that there were many individuals who appreciated its importance, and who only awaited an opportunity to give utterance and action to their feelings;—in almost every town, some,—in many, a band.

Some of our hopes, also, have become facts. The last Legislature acted toward this cause the part of a wise and faithful guardian. Inquiries having been sent into all parts of the Commonwealth to ascertain the deficiencies in our Common-School system, and the causes of failure in its workings; and the results of those inquiries having been communicated to the Legislature,—together with suggestions for the application of a few obvious and energetic remedies,—that body forthwith enacted such laws as the wants of the system most immediately and imperiously demanded. Probably at no session since the origin of our Common-School system have laws more propitious to its welfare been made, than during the last.

* * * * * * * *

But among all the auspicious events of the past year, ought not the friends of Popular Education to be most grateful, on account of the offer made by a private gentleman† to the Legislature, of the sum of ten thousand dollars, upon the conditions that the State should add thereto an equal sum, and that the amount should be expended, under the direction of the Board of Education, in qualifying teachers for our Common Schools, and of the promptness and unanimity with which the Legislature acceded to the proposition? I say, the *unanimity*, for the vote was entirely unanimous in the House of Representatives, and there was but one *nay* in the Senate. Vast donations have been made in this Commonwealth, both by the government and by individuals, for the cause of learning in some of its higher, and, of course, more limited departments; but I believe this to be the first instance where any considerable sum has been given for the cause of education, generally, and irrespective of class, or sect, or party. Munificent donations have frequently been made, among ourselves, as well as in other States and countries, to perpetuate some distinctive theory or dogma of one's own, or to requite a peculiar few who may have honored or flattered the giver. But this was given to augment the common mass of intelligence, and to promote universal culture; it was given with a high and enlightened disregard of all local, party, personal, or sectional views; it was given for the direct benefit of all the heart and all the mind, *extant, or to be extant,* in our beloved Commonwealth; and, in this respect, it certainly stands out almost, if not absolutely alone, both in the amount of the donation, and in the elevation of the motive that prompted it. I will not tarnish the brightness of this deed by attempting to gild it with praise.

* Copied, by permission, from *Lectures on Education by Horace Mann, Secretary of the Massachusetts Board of Education.* Boston: William B. Fowle. 1845. Most of the Lectures embraced in this volume were delivered by Mr. Mann before conventions of the friends of education, held in the several counties of Massachusetts in the autumn of each year, from 1838 to 1842. The lecture which follows was delivered in 1838, to prepare the public mind for a fair trial of the experiment of providing means for the special qualification of teachers for the common schools of the State.

† Hon. Edmund Dwight, of Boston.

One of the truest and most impressive sentences ever uttered by Sir Walter Scott is, however, so appropriate, and forces itself so strongly upon my mind, that I cannot repress its utterance. When that plain and homely Scotch girl, Jeannie Deans,—the highest of all the characters ever conceived by that gifted author,—is pleading her suit before the British queen, and showing herself therein to be ten times a queen,—she utters the sentiment I refer to: "But when," says she, "the hour of trouble comes to the mind or to the body, and when the hour of death comes, that comes to high and low, then it isna what we hae dune for oursells, but what we hae dune for others, that we think on maist pleasantly."

There is, then, at last, on the part of the government of Massachusetts, a recognition of the expediency of providing means for the special qualification of teachers for our Common Schools; or, at least, of submitting that question to a fair experiment. Let us not, however, deceive or flatter ourselves with the belief, that such an opinion very generally prevails, or is very deeply seated. A few, and those, as we believe, best qualified to judge, hold this opinion as an axiom. But this cannot be said of great numbers; and it requires no prophetic vision to foresee that any plan for carrying out this object, however wisely framed, will have to encounter not only the prejudices of the ignorant, but the hostility of the selfish.

The most momentous practical questions now before our State and country are these: In order to preserve our republican institutions, must not our Common Schools be elevated in character and increased in efficiency? and, in order to bring our schools up to the point of excellence demanded by the nature of our institutions, must there not be a special course of study and training to qualify teachers for their office? No other worldly interest presents any question comparable to these in importance. To the more special consideration of the latter, —namely, whether the teachers of our public schools require a special course of study and training to qualify them for their vocation,—I solicit your attention, during the residue of this address.

I shall not here insist upon any particular *mode* of preparation, or of preparation in any particular class of institutions,—whether Normal Schools, special departments in academies, colleges, or elsewhere,—to the exclusion of all other institutions. What I insist upon, is, not the form, but the substance.

In treating this subject, duty will require me to speak of errors and deficiencies; and of the inadequate conceptions now entertained of the true office and mission of a teacher. This is a painful obligation, and in discharging it I am sure I shall not be misunderstood by any candid and intelligent mind. Toward the teachers of our schools,—as a class,—I certainly possess none but the most fraternal feelings. Their want of adequate qualifications is the want of the times, rather than of themselves. Teachers, heretofore, have only been partakers in a general error,—an error in which you and I, my hearers, have been as profoundly lost as they. Let this be their excuse hitherto, and let the ignorance of the past be winked at; but the best service we can now render them, is to take this excuse away, by showing the inadequacy and the unsoundness of our former views. Let all who shall henceforth strive to do better, stand acquitted for past delinquencies; but will not those deserve a double measure of condemnation who shall set themselves in array against measures, which so many wise and good men have approved,—at least until those measures have been fairly tested? When the tree shall have been planted long enough to mature its fruit, then, *let it be known by its fruit.*

No one has ever supposed that an individual could build up a material temple, and give it strength, and convenience, and fair proportions, without first mastering the architectural art; but we have employed thousands of teachers for our children, to build up the immortal Temple of the Spirit, who have never given to this divine, educational art, a day nor an hour of preliminary study or attention. How often have we sneered at Dogberry in the play, because he holds that "to read and write comes by nature;" when we ourselves have undertaken to teach, or have employed teachers, whose only fitness for giving instruction, not only in reading and writing, *but in all other things*, has come by nature, if it has come at all; that is, in exact accordance with Dogberry's philosophy.

In maintaining the affirmative of this question,—namely, that all teachers do require a special course of study and training, to qualify them for their profes-

sion,—I will not higgle with my adversary in adjusting preliminaries. He may be the disciple of any school in metaphysics, and he may hold what faith he pleases, respecting the mind's nature and essence. Be he spiritualist or materialist, it here matters not,—nay, though he should deny that there is any such substance as mind or spirit at all, I will not stop to dispute that point with him,—preferring rather to imitate the example of those old knights of the tournament, who felt such confidence in the justness of their cause, that they gave their adversaries the advantage of sun and wind. For, whatever the mind may be, in its inscrutable nature or essence, or whether there be any such thing as mind or spirit at all, properly so called, this we have seen and do know, that there come beings into this world, with every incoming generation of children, who, although at first so ignorant, helpless, speechless,—so incapable of all motion, upright or rotary,—that we can hardly persuade ourselves they have not lost their way, and come, by mistake, into the wrong world; yet, after a few swift years have passed away, we see thousands of these same ignorant and helpless beings, expiating horrible offenses in prison-cells, or dashing themselves to death against the bars of a maniac's cage;—others of them, we see, holding "colloquy sublime," in halls where a nation's fate is arbitrated, or solving some of the mightiest problems that belong to this wonderful universe;—and others still, there are, who, by daily and nightly contemplation of the laws of God, have kindled that fire of divine truth within their bosoms, by which they become those moral luminaries whose light shineth from one part of the heavens unto the other. And this amazing change in these feeble and helpless creatures,—this transfiguration of them for good or for evil,—is wrought by laws of organization and of increase, as certain in their operation, and as infallible in their results, as those by which the skillful gardener substitutes flowers, and delicious fruits, and healing herbs, for briers, and thorns, and poisonous plants. And as we hold the gardener responsible for the productions of his garden, so is the community responsible for the general character and conduct of its children.

Some, indeed, maintain,—erroneously as we believe,—that a difference in education is the sole cause of all the differences existing among men. They hold that all persons come into the world just alike in disposition and capacity, though they go through it and out of it so amazingly diverse. They hold, in short, that if any two men had changed cradles, they would have changed characters and epitaphs;—that, not only does the same quantity of substance or essence go to the constitution of every human mind, but that all minds are of the same quality also,—all having the same powers, and bearing, originally, the same image and superscription, like so many half-dollars struck at the government mint.

But deeply as education goes into the core of the heart and the marrow of the bones, we do not claim for it any such prerogative. There are certain substructures of temperament and disposition, which education finds, at the beginning of its work, and which it can never wholly annul. Nor does it comport with the endless variety and beauty manifested in all other parts of the Creator's works, to suppose that he made all ears and eyes to be delighted with the same tunes and colors; or provided so good an excuse for plagiarism, as that all minds were made to think the same thoughts. This inherent and original diversity, however, only increases the difficulty of education, and gives additional force to the argument for previous preparation; for, were it true that all children are born just alike, in disposition and capacity, the only labor would be to discover the right method for educating a single child, and to stereotype it for all the rest.

This, however, we must concede to those who affirm the original equality and exact similitude of all minds;—namely, that all minds have the same elementary or constituent faculties. This is all that we mean when we say that human nature is every where the same. This is, in part, what the Scriptures mean when they say, "God hath made of one blood all nations of men." The contrasts among men result, not from the possession of a different number of original faculties, but from possessing the same faculties, in different proportions, and in different degrees of activity. The civilized men of the present day, have neither more nor less faculties, *in number*, than their barbarian ancestors had. If so, it would be interesting to ascertain about what year, or century, a new good faculty was given to the race, or an old bad one was taken away. An assembly of civilized men, on this side of the globe, convening to devise measures for dimin-

ishing the number of capital crimes, and thus to reduce the number of capital punishments, were *born* with the same number and kind of faculties,—though doubtless differing greatly in proportion and in activity,—with a company of Battas islanders, on the opposite side of the globe, who, perhaps at the same time, may be going to attend the holiday rites of a public execution, and, as is their wont, *to dine on the criminal.* As each human face has the same number of features, each human body the same number of limbs, muscles, organs, &c., so each human soul has the same capacities of Reason, Conscience, Hope, Fear, Love, Self-love, &c. The differences lie in the relative strength and supremacy of these powers. The human eye is composed of about twenty distinct parts or pieces; yet these constituent parts are so differently arranged that one man is far-sighted, another near-sighted. When an oculist has mastered a knowledge of one eye, he knows the general plan upon which all eyes have been formed; but he must still learn the peculiarities of each, or, in his practice, he will ruin all he touches.* When a surgeon, or an assassin, knows where one man's heart is, he knows, substantially, where the hearts of all other men may be found. And so of the mind and its faculties. It is because of this community of original endowments, that all the great works of nature, and art, and science, address a common susceptibility or capacity, existing in all minds. It is because of this kindred nature that the same earth is given to us all, as a common residence. The possession by each of his complement of powers and susceptibilities, confers the common nature, while the different portions or degrees in which they exist, and the predominance of one or a few over the others, break us up into moral and intellectual classes. It is impossible to vindicate the propriety of making or of carrying a Revelation to the whole human race, unless that race has common capacities and wants to which the revelation is adapted. And hence we learn the appalling truth,—a truth which should strike "loud on the heart as thunder on the ear,"—that every child born into this world has tendencies and susceptibilities pointing to the furthest extremes of good and evil. Each one has the capacity of immeasurable virtue or vice. As each body has an immensity of natural space open all around it, so each spirit, when waked into life, has an immensity of moral space open all around it. Each soul has a pinion by which it may soar to the highest empyrean, or swoop downward to the Tartarean abyss. In the feeblest voice of infancy, there is a tone which can be made to pour a sweeter melody into the symphonies of angels, or thunder a harsher discord through the blasphemies of demons. To plume these wings for an upper or a nether flight; to lead these voices forth into harmony or dissonance; to woo these beings to go where they should go, and to be what they should be,—does it, or does it not, my friends, require some knowledge, some anxious forethought, some enlightening preparation?

You must pardon me, if on this subject I speak to you with great plainness; and you must allow me to appeal directly to your own course of conduct in other things. You have property to be preserved for the support of your children while you live, or, when you die, for their patrimony; you have health and life to be guarded and continued, that they may not be bereaved of their natural protectors;—and you have the children themselves, with their unbounded, unfathomable capacities of happiness and misery. Now, in respect to your property, what is it your wont to do, when a young lawyer comes into the village, erects his sign, and (the most unexclusive of men) gives to the public a general invitation? Though he has a diploma from a college, and the solemn approval of bench and bar, yet how warily do the public approach him. How much he is reconnoitered before he is retained. How many premeditated plans are laid to appear to meet him accidentally, to talk over indifferent subjects with him,—the weather, the crops, or Congressional matters,—in order to measure him, and probe him, and see if there be any hopefulness in him. And should all things

* I have heard that distinguished surgeon, Doct. John C. Warren, of Boston, relate the following anecdote, which happened to him in London:—Being invited to witness a very difficult operation upon the human eye, by a celebrated English oculist, he was so much struck by the skill and science which were exhibited by the operator, that he sought a private interview with him, to inquire by what means he had become so accomplished a master of his art. "Sir," said the oculist, "I spoiled a hat-full of eyes to learn it." Thus it is with incompetent teachers; they may spoil schoolrooms-full of children to learn how to teach,—and perhaps may not always learn even then.

promise favorably, the young attorney is intrusted, in the first instance, only with some outlawed note, or some doubtful account, before a justice of the peace. No man ever thinks of trusting a case which involves the old homestead, to his inexperienced hands. He would as soon set fire to it.

So, too, of a young physician. No matter from what medical college, home or foreign, he may bring his credentials. From day to day the neighbors watch him without seeming to look at him. In good-wives' parties, the question is confidentially discussed, whether, in a case of exigency, it would be safe to send for him. And when, at last, he is gladdened with a call, it is only to look at some surface ailment, or to *pother* a little about the extremities. Nobody allows him to lay his unpracticed hand upon the vitals. Now this common sentiment,—this common practice of mankind,—is only the instinctive dictate of prudence. It is only a tacit recognition of a truth felt by all sensible men, that there are a thousand ways to do a thing wrong, but only one to do it right. And if it be but reasonable to exercise such vigilance and caution, in selecting a healer for our bodies which perish, or a counselor for our worldly estates, who shall assign limits to the circumspection and fidelity with which the teachers of our children should be chosen, who, in the space of a few short years, or even months, will determine, as by a sort of predestination, upon so much of their future fortunes and destiny?

Again: it is the universal sense of mankind, that skill and facility, in all other things, depend upon study and practice. We always demand more, where opportunities have been greater. We stamp a man with inferiority, though he does *ten* times better than another, if he has had *twenty* times the advantages. We know that a skillful navigator will carry a vessel through perilous straits, in a gale of wind, and save cargo and lives, while an ignorant one will wreck both, in a broad channel. With what a song of delight we have all witnessed, how easily and surely that wise and good man, at the head of a great institution in our own State, will tame the ferocity of the insane; and how, when each faculty of a fiery spirit bursts away like an affrighted steed from its path, this mighty tamer of madmen will temper and quell their wild impetuosity and restore them to the guidance of reason. Nay, the great moral healer can do this, not to one only, but to hundreds, at a time; while, even in a far shorter period than he asks to accomplish such a wonderful work, an ignorant and passionate teacher will turn a hundred gentle, confiding spirits into rebels and anarchists. And, my hearers, we recognize the existence of these facts, we apply these obvious principles, to every thing but to the education of our children.

Why cannot we derive instruction even from the folly of those wandering showmen who spend a life in teaching brute animals to perform wonderful feats? We have all seen, or at least we have all heard of, some learned horse, or learned pig, or learned dog. Though the superiority over their fellows, possessed by these brute prodigies, may have been owing, in some degree, to the possession of greater natural parts, yet it must be mainly attributed to the higher competency of their instructor. Their teacher had acquired a deeper insight into their natures; his sagacious practice had discovered the means by which their talents could be unfolded and brought out. However unworthy and even contemptible, therefore, the mere trainer of a dog may be, yet he illustrates a great principle. By showing us the superiority of a well-trained dog, he shows what might be the superiority of a well-trained child. He shows us that higher acquisitions,—what may be called academical attainments,—in a few favored individuals of the canine race, are not so much the results of a more brilliant genius on the part of the dog-pupil, as they are the natural reward and consequence of his enjoying the instructions of a professor who has concentrated all his energies upon dog-teaching.

Surely it will not be denied that a workman should understand two things in regard to the subject-matter of his work:—*first*, its natural properties, qualities, and powers; and *secondly*, the means of modifying and regulating them, with a view to improvement. In relation to the mechanic arts, this is admitted by all. Every body knows that the strength of the blow must be adjusted to the malleability of the metal. It will not do to strike glass and flint either with the same force or with the same implements; and the proper instrument will never be selected by a person ignorant of the purpose to be effected by its use. If a

man working on wood mistakes it for iron, and attempts to soften it in the fire, his product is—ashes. And so if a teacher supposes a child to have but one tendency and one adaptation when he has many;—if a teacher treats a child as though his nature were wholly animal, or wholly intellectual, or wholly moral and religious, he disfigures and mutilates the nature of that child, and wrenches his whole structure into deformity.

The being, *Man*, is more complex and diversified in constitution, and more variously endowed in faculties, than any other earthly work of the Creator. It is in this assemblage of powers and prerogatives that his strength and majesty reside. They constitute his sovereignty and lordship over the creation around him. By our bodily organization we are adapted to the material world in which we are placed;—our eye to the light, which makes known to us every change in the form, motion, color, position, of all objects within visual range;—our ear and tongue to the air, which flows around us in silence, yet is forever ready to be waked into voice and music;—our hand to all the cunning works of art which subserve utility or embellishment. Still more wonderfully does the spiritual nature of man befit his spiritual relations. Whatever there is of law, of order, of duty, in the works of God, or in the progressive conditions of the race, all have their spiritual counterparts within him. By his perceptive and intellectual faculties he learns the properties of created things, and discovers the laws by which they are governed. By tracing the relation between causes and effects, he acquires a kind of prophetic vision and power; for, by conforming to the unchanging laws of Nature, he enlists her in his service, and she works with him in fulfilling his predictions. Regarded as an individual, and as a member of a race which reproduces itself and passes away, his lower propensities,—those which he holds in common with the brutes,—are the instincts and means to preserve himself and to perpetuate his kind; while by his tastes, and by the social, moral, and religious sentiments of which he is capable, he is attuned to all the beauties and sublimities of creation, his heart is made responsive to all the delights of friendship and domestic affection, and he is invited to hold that spiritual intercourse with his Maker, which at once strengthens and enraptures.

Now the voice of God and of Nature declares audibly which of these various powers within us are to command, and which are to obey; and with which, in every questionable case, resides the ultimate arbitrament. Even the lowest propensities are not to be wholly extirpated. Within the bounds prescribed by the social and the divine law, they have their rightful claims. But the moral and the religious sentiments,—Benevolence, Conscience, Reverence for the All-creating and All-bestowing Power,—these have the prerogative of supremacy and absolute dominion. These are to walk the halls of the soul, like a god, nor suffer rebellion to live under their eye. Yet how easy for this many-gifted being to fall,—more easy, indeed, because of his many gifts. Some subject-faculty, some subordinate power, in the spiritual realm, unfortunately inflamed, or,—what is far more common,—unwisely stimulated by an erroneous education, grows importunate, exorbitant, aggrandizes itself, encroaches upon its fellow-faculties, until, at last, obtaining the mastery, it subverts the moral order of the soul, and wages its parricidal war against the sovereignty of conscience within, and the laws of society and of Heaven without. And how unspeakably dreadful are the retributions which come in the train of these remorseless usurpers, when they obtain dominion over the soul! Take, for instance, the earliest-developed, the most purely selfish and animal appetite that belongs to us,—that for nourishing beverage. It is the first which demands gratification after birth. Subjected to the laws of temperance, it will retain its zest, fresh and genial, for threescore years and ten, and it affords the last corporal solace upon earth to the parched lips of the dying man. Yet, if the possessor of this same pleasure-giving appetite shall be incited, either by examples of inordinate indulgence, or by festive songs in praise of the vine and the wine-cup, to inflame it, and to feed its deceitful fires, though but for the space of a few short years, then the spell of the sorcerer will be upon him; and, day by day, he will go and cast himself into the fiery furnace which he has kindled;—nor himself, the pitiable victim, alone, but he will seize upon parents and wife and his group of innocent children, and plunge with them all into the seething hell of intemperance.

So there is, in human nature, an innate desire of acquiring property,—of own-

ing something,—of using the possessives *my* and *mine*. Within proper limits, this instinct is laudably indulged. Its success affords a pleasure in which reason can take a part. It stimulates and strengthens many other faculties. It makes us thoughtful and fore-thoughtful. It is the parent of industry and frugality,—and industry and frugality, as we all know, are blood-relations to the whole family of the virtues. But to the eye and heart of one in whom this love of acquisition has become absorbing and insane, all the diversified substances in creation are reduced to two classes,—that which is gold, and that which is not;—and all the works of Nature are valued or despised, and the laws and institutions of society upheld or assailed, as they are supposed to be favorable or unfavorable to the acquisition of wealth. Whether at home or abroad, in the festive circle or in the funeral train; whether in hearing the fervid and thrilling appeals of the sanctuary, or the pathos of civic eloquence, one idea alone,—that of money, money, money,—holds possession of the miser's soul; its voice rings forever in his ear; and were he in the garden of Eden,—its beauty, and music, and perfume suffusing all his senses,—his only thought would be, how much money it would bring! Such mischief comes from giving supremacy to a subordinate, though an essential and highly useful faculty. This mischief, to a greater or less extent, parents and teachers produce, when, through an ignorance of the natural and appropriate methods of inducing children to study, they hire them to learn by the offer of pecuniary rewards.

So, too, we all have an innate love for whatever is beautiful;—a sentiment that yearns for higher and higher degrees of perfection in the arts, and in the embellishments of life,—a feeling which would prompt us to "gild refined gold, to paint the lily, to throw a perfume on the violet, and add another hue unto the rainbow." Portions of the external world have been exquisitely adapted to this inborn love of the beautiful, by Him who has so clothed the lilies of the field that they outshine Solomon in all his glory. This sentiment may be too much or too little cultivated:—so little as to make us disdain gratifications that are at once innocent and pure; or so much as to over-refine us into a hateful fastidiousness. In the works of nature, beauty is generally, if not always, subordinated to utility. In cases of incompatibility, gracefulness yields to strength, not strength to gracefulness. How would the rising sun mock us with his splendor, if he brought no life or warmth in his beams! The expectation of autumnal harvests enhances the beauty of vernal bloom. These manifestations of nature admonish us respecting the rank which ornament or accomplishment should hold in the character and in the works of men; and, of course, in the education of children. Christ referred *occasionally* to the beauties and charms of nature, but dwelt *perpetually* upon the obligations of duty and charity. But what opposite and grievous offenses are committed on this subject by different portions of society! The laboring classes, by reason of early parental neglect in cultivating a love for the beautiful, often forego pleasures which a bountiful Providence scatters profusely and gratuitously around them, and strews beneath their feet; while there is a class of persons at the other extremity of the social scale, who, from never comprehending the immeasurable value of the objects for which they were created, and the vast beneficence of which, from their wealth and station, they are capable, actually try every thing, however intrinsically noble or sacred, by some conventional law of fashion, by some arbitrary and capricious standard of elegance. In European society, this class of "fashionables" is numerous. They have their imitators here,—beings, who are not men and women, but similitudes only,—who occupy the vanishing point in the perspective of society, where all that is true, or noble, or estimable in human nature, fades away into nothing. With this class it is no matter what a man does with the "Ten Commandments," provided he keeps those of Lord Chesterfield; and, in their society, Beau Brummel would take precedence of Dr. Franklin.

In a Report lately made by the Agricultural Commissioner for the survey of this Commonwealth, I noticed a statement respecting some farmers in the northern part of the county of Essex, who attempted to raise sun-flowers for the purpose of extracting oil from the seeds. Twenty bushels to the acre was the largest crop raised by any one. Six bushels of the seed yielded but one gallon of oil, worth, in the market, one dollar and seventeen cents only. It surely required no great boldness to assert that the experiment did not succeed:—culti-

vation, one acre: product, three gallons of oil; value, three dollars and fifty cents!—which would, perhaps, about half repay the cost of labor. Woe to the farmer who seeks for independence by raising sun-flowers! Ten times woe to the parents who rear up sun-flower sons or sun-flower daughters,—instead of sons whose hearts glow and burn with an immortal zeal to run the noble career of usefulness and virtue which a happy fortune has laid open before them;—instead of daughters who cherish such high resolves of duty as lift them even above an enthusiasm for greatness, into those loftier and serene regions where greatness comes not from excitement, but is native, and ever-springing and ever-abiding. Every son, whatever may be his expectations as to fortune, ought to be so educated that he can superintend some part of the complicated machinery of social life; and every daughter ought to be so educated that she can answer the claims of humanity, whether those claims require the labor of the head or the labor of the hand. Every daughter ought to be so trained that she can bear, with dignity and self-sustaining ability, those revolutions in Fortune's wheel, which sometimes bring the kitchen up and turn the parlor down.

Again; we have a natural, spontaneous feeling of self-respect, an innate sense that, simply in our capacity as human beings, we are worth something, and entitled to some consideration. This principle constitutes the interior frame-work of some of the virtues, veiled, indeed, by their own beautiful covering, but still necessary in order to keep them in an erect posture, amidst all the overbearing currents and forces of the world. Where this feeling of self-respect exists too weakly, the whole character becomes limber, flaccid, impotent, sinks under the menace of opposition, and can be frightened out of any thing or into any thing. On the other hand, when this propensity aggrandizes itself, and becomes swollen and deformed with pride, and conceit, and intolerance, it is a far more offensive nuisance than many of those which the law authorizes us to abate, summarily, by force and arms. Our political institutions are a rich alluvium for the growth of self-esteem; for, while every body knows that there are the greatest differences between men in point of honesty, of ability, of will to do good and to promote right, yet our fundamental laws,—and rightly too,—ordain a political equality. But what is not right is, that the political equality is the fact mainly regarded, while there is a tendency to disregard the intellectual and moral inequalities. And thus a faculty, designed to subserve, and capable of subserving the greatest good, engenders a low ambition, and fills the land with the war-whoop of party strife.

These are specimens only of a long list of original tendencies or attributes of the human mind, from a more full enumeration and exposition of which, I must, on this occasion, refrain. But have not enough been referred to, to authorize us to assert the general doctrine, that every teacher ought to have some notions, clear, definite, and comprehensive, of the manifold powers,—the various nature,—of the beings confided to his hands, so that he may repress the redundancy of a too luxuriant growth, and nourish the feeble with his fostering care? No idea can be more erroneous than that children go to school to learn the rudiments of knowledge only, and not to form character. The character of children is always forming. No place, no companion is without an influence upon it; and at school it is formed more rapidly than any where else. The mere fact of the presence of so many children together, puts the social or dissocial nature of each into fervid action. To be sent to school, especially in the country, is often as great an event in a child's life, as it is, in his father's, to be sent to the General Court: and we all know with what unwonted force all things affect the mind, in new places and under new circumstances. Every child, too, when he first goes to school, understands that he is put upon his good behavior; and, with man or child, it is a very decisive thing, and reaches deep into character and far into futurity, when put upon his good behavior, to prove recreant. Now, teachers take children under their care, as it were, *during the first warm days* of the spring of life, when more can be done toward directing their growth and modifying their dispositions, than can be done in years, at a later season of their existence.

Equally indispensable is it, that every teacher should know, by what means,—by virtue of what natural laws,—the human powers and faculties are strengthened or enfeebled. There is a principle running through every mental operation,—without a knowledge of which, without a knowledge how to apply which,

the life of the most faithful teacher will be only a succession of well-intentioned errors. The growth or decline of all our powers depends upon a steadfast law. There is no more chance in the processes of their growth or decay than there is in the Multiplication Table. They grow by exercise, and they lose tone and vigor by inaction. All the faculties have their related objects, and they grow by being excited to action through the stimulus or instrumentality of those objects. Each faculty, too, has its own set or class of related objects; and the classes of related objects differ as much from each other as do the corresponding faculties which they naturally excite. If any one power or faculty, therefore, is to be strengthened, so as to perform its office with facility, precision, and dispatch, that identical faculty,—not any other one,—must be exercised. It does not strengthen my left arm to exercise my right; and this is just as true of the powers of the mind as of the organs of the body. The whole pith of that saying of Solomon, "Train up a child in the way he should go," consists in this principle, because "to train" means to drill, to repeat, to do the same thing over and over again,—that is, *to exercise*. Solomon does not say, "*Tell* a child the way he should go, and when he is old, he will not depart from it." Had he said this, we could refute him daily by ten thousand facts. Unfortunately, education among us, at present, consists too much in *telling*, not in *training*, on the part of parents and teachers; and, of course, in *hearing*, not in *doing*, on the part of children and pupils. The blacksmith's right arm, the philosopher's intellect, the philanthropist's benevolence, all grow and strengthen according to this law of exercise. The farmer *works* solid flesh upon his cattle; the pugilist *strikes* vigor into his arms and breast; the foot-soldier *marches* strength into his limbs; the practical man *thinks* quickness and judgment into his mind; and the true Christian *lives* his prayers of love and his thoughts of mercy, until every man becomes his brother. Our own experience and observation furnish us with a life-full of evidence attesting this principle. How did our feet learn to walk, our fingers to write, our organs of speech to utter an innumerable variety of sounds? By what means does the musician pass from coarse discords to perfect music,—from hobbling and shambling in his measure, to keeping time like a chronometer,—from a slow and timid touch of keys or chords, to such celerity of movement, that, though his will sends out a thousand commands in a minute, his nimble fingers obey them all? It is this exercise, this repetition, which gives to jugglers their marvelous dexterity. By dint of practice, their motions become quicker than our eyesight, and thus elude inspection. A knowledge of this principle solves many of the riddles of life, by showing us whence comes the domineering strength of human appetites and passions. It comes from exercise,—from a long indulgence of them in thought and act,—until the offspring of sinful desire turn back, and feast upon the vitals of the wretch who nurtured them. It is this which makes the miser pant and raven for gain, more and more, just in proportion to the shortness of the life during which he can enjoy it. It is this which sends the drunkard to pay daily tribute to his own executioner. It is this which scourges back the gambler to the hell he dreads.

It is by this law of exercise that the perceptive and reflective intellect,—I mean the powers of observing and judging,—are strengthened. If, therefore, in the education of the child, the action of these powers is early arrested; if his whole time is engrossed and his whole energy drawn away, by other things; or, if he is not supplied with the proper objects or apparatus on which these faculties can exert themselves,—then the after-life of such a child will be crowded with practical errors and misjudgments. As a man, his impressions of things will be faint and fleeting; he will never be able to describe an object as he saw it, nor to tell a story as he heard it. No handcraftsman or mechanic ever becomes what we call a first-rate workman, until after innumerable experiments and judgments,—that is, repetitions, or exercises. And the rule is the same even with genius;—artisan or artist, he must practice long and sedulously upon lines, proportions, reliefs, before he can become the first sculptor of the age, or the first bootmaker in the city. The teacher, then, must continue to exercise the powers of his pupils, until he secures accuracy even in the minutest things he teaches. Every child can and should learn to judge, almost with mathematical exactness, how long an inch is;—no matter if he does not guess within a foot of it the first time. Whether the story of Casper Hauser be true or not, it has

verisimilitude, and is therefore instructive. It warns us what the general result must be, if, by a non-presentation of their related objects, the faculties of a child are not brought into exercise. We meet with persons every day who, in regard to some one or more of the faculties, are Casper Hausers. This happens, almost universally, not through any natural defect, but because parents and teachers have been ignorant, either of the powers to be exercised, or of the related objects through whose instrumentality they can be excited to action.

But here arises a demand for great skill, aptitude, and resources, on the part of the teacher; for, by continuing to exercise the same faculty, I do not mean a monotonous repetition of the same action, nor a perpetual presentation of the same object or idea. Such a course would soon cloy and disgust, and thus terminate all effort in that direction. Would a child ever learn to dance, if there were but one figure; or to sing, if there were but one tune? Nature, science, art, offer a boundless variety of objects and processes, adapted to quicken and employ each of the faculties. These resources the teacher should have at his command, and should make use of them, in the order, and for the period, that each particular case may require. Look into the shops of our ingenious artisans and mechanics, and see their shining rows of tools,—hundreds in number,—but each adapted to some particular process in their curious art. Look into the shop or hut of a savage, an Indian mechanic, and you will find his chest of tools composed of a single jack-knife! So with our teachers. Some of them have apparatus, diagram, chart, model; they have anecdote, epigram, narrative history, by which to illustrate every branch of study, and to fit every variety of disposition; while the main resource of others, for all studies, for all ages, and for all dispositions, is—the rod!

Again: a child must not only be exercised into correctness of observation, comparison, and judgment, but into accuracy in the narration or description of what he has seen, heard, thought, or felt, so that, whatever thoughts, emotions, memories, are within him, he can present them all to others in exact and luminous words. Dr. Johnson said, "Accustom your children constantly to this: if a thing happened at one window, and they, when relating it, say that it happened at another, do not let it pass, but instantly check them. You do not know where deviation from the truth will end." Every man who sees effects in causes, will fully concur with the Doctor in regard to the value of such a habit of accuracy as is here implied. If, in the narration of an event, or in the recitation of a lesson, a child is permitted to begin at the last end of it, and to scatter the middle about promiscuously, depend upon it, if that child, after growing up, is called into court as a witness, somebody will suffer in fortune, in reputation, or perhaps in life. When practicing at the bar, I was once engaged in an important case of slander, where the whole question of the innocence or guilt of the defendant turned upon the point whether, at a certain time, he was seen out of one window or out of another; and the stupid witness first swore that it was one window, then another window, and at last, thought it might be a door; and doubtless, he could have been made to swear that he saw him through the skylight. Would you appreciate the importance of accuracy, in observation and statement, take one of those cases which so frequently occur in our courts of law, where a dozen witnesses,—all honest,—swear one way, and another dozen,—equally honest,—counter-swear; and contrast it with a case, which so rarely occurs, where a witness, whose mind, like a copying machine, having taken an exact impression of whatever it has seen or heard, attests to complicated facts, in a manner so orderly, luminous, natural,—giving to each, time, locality, proportion, that when he has finished, every auditor,—bench, bar, spectators,—all feel as though they had been personally present and witnessed the whole transaction. Now, although something of this depends, unquestionably, upon soundness in physical and mental organization, yet a vast portion of it is referable to the early observation or neglect, on the part of teacher or parent, of the law we are considering.

There is another point, too, which the teacher should regard, especially where only a small portion of non-age is appropriated to school attendance. In exercising the faculties for the purpose of strengthening them, the greatest amount of useful knowledge should be communicated. The faculties may be exercised and strengthened in acquiring useful or useless knowledge. A farmer or a stone-

mason may exercise and strengthen the muscles of his body, by pitching or rolling timbers or stones backward and forward; but, by converting the same materials into a house or a fence, he may at once gain strength and do good. Every teacher, at the same time that he exercises the faculties of his pupils, ought to impart the greatest amount of valuable knowledge; and he should always be above the temptation of keeping a pupil in a lower department of study, because he himself does not understand the higher; or, on the other hand, of prematurely carrying his pupil into a higher department, because of his own ignorance of the lower. Suppose a bright boy, for instance, to be studying arithmetic and geography, at school. Now, arithmetic cannot be taught unless it is understood; but, with the help of an atlas, and a text-book whose margin is all covered with questions, the business of teaching geography may be set up on a very slender capital of knowledge. And here a teacher who is obliged to be very economical of his arithmetic, would be tempted to keep his pupil upon all the small towns, and tiny rivers, and dots of islands in the geography, in order to delay him, and gain time,—like the officers of those banks whose specie runs low, who seek to pay off their creditors in *cents*, because it takes so long to count the copper. Every teacher ought to know vastly more than he is required to teach, so that he may be furnished, on every subject, with copious illustration and instructive anecdote; and so that the pupils may be disabused of the notion, they are so apt to acquire, that they carry all knowledge in their satchels. Every teacher should be possessed of a faculty at explanation,—a tact in discerning and solving difficulties,—not to be used too often, for then it would supersede the effort it should encourage,—but when it is used, to be quick and sure as a telescope, bringing distant objects near, and making obscure ones distinct. In the important, but grossly neglected and abused exercise of reading, for instance, every new fact, every new idea, is *news* to the child; and, did he fully understand it, he would be as eager to learn it, as we are to learn what is *news* to us. But how, think you, should we be vexed, if our news-bringer spoke every third word in a foreign language; or gave us only a Pennsylvania newspaper printed in German, when we wanted to know how their votes stood in an election for President? Whatever words a child does not understand, in his reading lesson, are, to him, words in a foreign language; and they must be translated into his own language before he can take any interest in them. But if, instead of being translated into his language, they are left unnoticed, or are translated into another foreign language still,—that is, into other words or phrases of which he is ignorant,—then, the child, instead of delightful and instructive ideas, gets empty words, mere sounds, atmospheric vibrations only. In Dr. Johnson's Dictionary, the word "*Net-work*" is defined to be "any thing reticulated or decussated, with interstices between the intersections." Now who, ignorant of the meaning of the word "net-work" before, would understand it any better by being told, that it is "any thing reticulated or decussated, with interstices between the intersections?" Nor would he be much enlightened if, on looking further, he found that the same author had given the following definitions of the defining words:—"reticulated," "*formed with interstitial vacuities;*"—"decussated," "*intersected at acute angles;*"—"interstice," "*space between one thing and another;*"—"intersection," "*point where lines cross each other.*" If this is not, as Milton says, "dark with excess of bright," it is, at least, "darkness visible." A few years since, a geography was published in this State,—the preface of which boasted of its adaptation to the capacities of children,—and, on the second page, there was this definition of the words "zenith and nadir:"—"zenith and nadir, two Arabic words *importing their own signification.*" A few years since, an English traveler and book-maker, who called himself Thomas Ashe, Esq., visited the Big Bone Licks, in Kentucky, where he found the remains of the mammoth, in great abundance, and whence he carried away several wagon-loads of bones. In describing the size of one of the shoulder-blades of that animal, he says, it "was *about as large as a breakfast-table!*" A child's mind may be dark and ignorant before, but, under such explanations as these, darkness will coagulate, and ignorance be sealed in hermetically. Let a school be so conducted but for one season, and all life will be abstracted from it; and it will become the painful duty of the school committee, at its close to attend a *post-mortem* ex-

amination of the children,—without even the melancholy satisfaction of believing that science will be benefited by the horrors of the dissection.

Every teacher should be competent to some care of the health of his pupils,—not merely for the purpose of regulating the temperature of the school-room, and, of course, the transition which the scholars must undergo, on entering or leaving it,—though this is of no small importance,—but so that, as occasion offers, he may inculcate a knowledge of some of the leading conditions upon which health and life depend. I saw, last year, in the public town school of Northampton,—under the care of Mr. R. M. Hubbard,—more than a hundred boys, from ten or eleven to fifteen or sixteen years of age, who pointed out the place and gave the name of all the principal bones in their bodies, as well as an anatomist would have done; who explained the physiological processes of the circulation of the blood and the alimentation of food, and described the putrefactive action of ardent spirits upon the delicate tissues of the stomach. Now such boys have a chance, nay, a certainty, of far longer life and far better health, than they would otherwise have; and as they grow up, they will be far less easily tempted to emulate either of the three cockney graces,—Gin, Swearing, and Tobacco.

But I must pass by other considerations, respecting the growth and invigoration of the intellectual faculties, and the classes of subjects upon which they should be employed. I hasten to the consideration of another topic, incalculably more important.

The moral faculties increase or decline, strengthen or languish, by the same law of exercise. In legislating for men, *actions* are mainly regarded; but in the education of children, *motives are every thing*, MOTIVES ARE EVERY THING. All, this side of the motive, is mere mechanism, and it matters not whether it be done by the hand, or by a crank. There was profound philosophy in the old theological notion, that whoever made a league with the devil, in order to gratify a passion through his help, became the devil's property afterward. And so, when a teacher stimulates a child to the performance of actions, externally right, by appealing to motives intrinsically wrong, he sells that child into bondage to the wrong motive. Some parents, finding a desire of luxurious food a stronger motive-power in their children than any other, accomplish every thing through its means. They hire them to go to school and learn, to go to church and remember the text, and to behave well before company, by a promise of dainties. Every repetition of this enfeebles the sentiment of duty, through its inaction, while it increases the desire for delicacies, by its exercise; and as they successively come into competition afterward, the virtue will be found to have become weaker, and the appetite stronger. Such parents touch the wrong pair of nerves,—the sensual instead of the moral, the bestial instead of the divine. These springs of action lie at the very extremes of human nature,—one class down among the brutes, the other up among the seraphim. When a child, so educated, becomes a man, and circumstances make him the trustee or fiduciary of the friendless and unprotected, and he robs the widow and orphan to obtain the means of luxury or voluptuousness, we exclaim, "Poor human nature," and are ready to appoint a Fast; when the truth is, he was educated to be a knave under that very temptation. Were a surgeon to operate upon a human body with as little knowledge of his subject as this, and whip round his double-edged knife where the vital parts lie thickest, he would be tried for manslaughter at the next court, and deserve conviction.

Take another example;—and I instance one of the motive-forces which, for the last fifty or a hundred years, has been mainly relied on, in our schools, academies, and colleges, as the stimulus to intellectual effort, and which has done more than every thing else to cause the madness and the profligacy of those political and social rivalries that now convulse the land. Let us take a child who has only a moderate love of learning, but an inordinate passion for praise and place; and we therefore allure him to study by the enticements of precedents and applause. If he will surpass all his fellows, we advance him to the post, and signalize him with the badges of distinction, and never suffer the siren of flattery to cease the enchantments of her song. If he ever has any compassionate misgivings in regard to the effect which his own promotion may have upon his less brilliant, though not less meritorious fellow-pupils, then we seek to withdraw his thoughts from this virtuous channel, and to turn them to the selfish contempla-

tion of his own brilliant fortunes in future years;—if waking conscience ever whispers in his ear, that that pleasure is dishonorable which gives pain to the innocent; then we dazzle him with the gorgeous vision of triumphal honors and applauding multitudes;—and when, in after-life, this victim of false influences deserts a righteous cause because it is declining, and joins an unrighteous one because it is prospering, and sets his name in history's pillory, to be scoffed and jeered at for ages, then we pour out lamentations, in prose and verse, over the moral suicide! And yet, by such a course of education, he was prepared beforehand, like a skillfully organized machine, to prove a traitor and an apostate at that very conjuncture. No doubt, a college-boy will learn more Greek and Latin if it is generally understood that college-honors are to be mainly awarded for proficiency in those languages; but what care we though a man can speak seven languages, or dreams in Hebrew or Sanscrit, because of their familiarity, if he has never learned the language of sympathy for human suffering, and is deaf when the voice of truth and duty utters their holy mandates! We want men who feel a sentiment, a *consciousness*, of brotherhood for the whole human race. We want men who will instruct the ignorant,—not delude them; who will succor the weak,—not prey upon them. We want men who will fly to the moral breach when the waters of desolation are pouring in, and who will stand there, and, if need be, die there,—applause or no applause. No doubt, every one is bound to take watchful care of that portion of his happiness which rightfully depends upon the good opinion of others; but before any teacher attempts to secure the proficiency of his pupils by inflaming their love of praise and place, ought he not to appeal, with earnest and prolonged entreaty, to every higher sentiment? and even then, should he fail of arousing a desire for improvement, would it not be better to abandon a pupil to mediocrity, or even insignificance, than to insure him the highest eminence by awakening an unholy ambition in his bosom? It is infinitely better for any nation to support a hospital for fools, than to have a parliament or a congress of knaves.

And thus it is with all moral developments. Ignorance may appeal to a wrong motive, and thus give inordinate strength to an inferior sentiment, while honestly in quest of a right action. For a few times, perhaps even for a few years, the appeal may be successful; but, by-and-by, the inferior sentiment, or propensity, will gain predominance, and usurp the throne, and rule by virtue of its own might.

So, too, a train of circumstances may be prepared, or a system of government adopted, designed by their author for good, yet productive of a venomous brood of feelings. Suppose a teacher attempts to secure obedience by fear, instead of love, but still lacks the energy or the talent requisite for success. Forthwith, and from the necessity of the case, there are two hostile parties in that school,—the teacher with his government to maintain, the pupils with their various and ever-springing desires to gratify, in defiance of that government. Not only will there be revolts and mutinies, revolutions and counter-revolutions in such a school, but, what is infinitely worse, because of its meanness and baseness, there will be generated a moral pestilence of deception and trickery. The boldest spirits,—those already too bold and fool-hardy,—will break out into open rebellion, and thus begin to qualify themselves to become, in after-life, violators and contemners of the laws of society; while those who are already prone to concealment and perfidy, will sharpen their wits for deception; they will pretend to be saying or doing one thing when saying or doing another; they will sever the connection between tongue and heart; they will make the eyes, the face, and all the organs that contribute to the natural language belie the thoughts; and, in fine, will turn the whole body into an instrument of dissimulation. Such children, under such management, are every day preparing to become,—not men of frankness, of ingenuousness, of a beautiful transparency of disposition,—but sappers and miners of character,—men accomplishing all their ends by stratagem and ambush, and as full of guile as the first serpent. Who of us has not seen some individual so secretive and guileful as to be impervious to second-sight, or even to the boasted vision of animal magnetism? I cannot but believe that most of those hateful specimens of duplicity,—I might rather say, of tripli city, or multiplicity,—which we sometimes encounter in society, had their origin in the attempts made in early life to evade commands injudiciously given, or not

enforced when given. If any thing pertaining to the education of children demands discretion, prudence, wisdom, it is the commands which we impose upon them. In no case ought a command ever to be issued to a child without a moral certainty either that it will be voluntarily obeyed, or, if resisted, that it can be enforced; because disobedience to superiors, who stand at first in the place of the child's conscience, prepares the way for disobedience to conscience itself, when that faculty is developed. Hence the necessity of discriminating, as a preliminary, between what a child will do, or can be made to do, and the contrary. Hence, when disobedience is apprehended, the issue should be tried rather on a case of prohibition than of injunction, because a child can be deterred when he cannot be compelled. Hence, also, the necessity of discriminating between what a child has the moral power to do, and what it is in vain to expect from him. Take a child who has been brought up luxuriously, indulgently, selfishly, and command him, in the first instance, to incur some great sacrifice for a mere stranger, or for some object which he neither understands nor values, and disobedience is as certain as long days in the middle of June;—I mean the disobedience of the spirit, for fear, perhaps, may secure the performance of the outward act. Such a child knows nothing of the impulsions of conscience, of the joyful emotions that leap up in the heart after the performance of a generous deed; and it is as absurd to put such a weight of self-denial upon his benevolence, the first time, as it would be to put a camel's load upon his shoulders. Such a child is deeply diseased. He is a moral paralytic. In regard to all benevolent exertion and sacrifice, he is as weak as an infant; and he can be recovered and strengthened to virtuous resolutions only by degrees. What should we think of a physician, who, the first time his patient emerged from a sick chamber,—pallid, emaciated, tottering,—should prescribe a match at wrestling, or the running of races? Yet this would be only a parallel to the mode in which selfish or vicious children are often treated; nay, some persons prepare or select the most difficult cases,—cases requiring great generosity or moral intrepidity,—by which to break new beginners into the work of benevolence or duty. If, by a bad education, a child has lost all generous affections (for no child is born without them); if he never shares his books or divides his luxuries with his playmates; if he hides his playthings at the approach of his little visitors; if his eye never kindles at the recital of a magnanimous deed,—of course I mean one the magnanimity of which he can comprehend,—then he can be won back to kindness and justice only by laborious processes, and in almost imperceptible degrees. In every conversation before such children, generosity and self-denial should be spoken of with a fervor of admiration and a glow of sympathy. Stories should be told or read before them, in which the principal actors are signalized by some of the qualities they delight in (always provided that no element of evil mingles with them); and when their attachments are firmly fastened upon hero or heroine, then the social, amiable, and elevated sentiments which are deficient in the children themselves, should be developed in the actors or characters whom they have been led to admire. A child may be led to admire qualities on account of their relationships and associations, when he would be indifferent to them if presented separately. If a child is selfish, the occasion for kind acts should be prepared, where all the accompaniments are agreeable. As the sentiment of benevolence gains tone and strength, and begins to realize some of those exquisite gratifications which God, by its very constitution, has annexed to its exercise, then let the collateral inducements be weakened, and the experiments assume more of the positive character of virtue. In this way, a child so selfish and envious as to be grieved even at the enjoyment of others, may be won, at last, to seek for delight in offices of humanity and self-sacrifice. There is always an avenue through which a child's mind can be reached; the failures come from our want of perseverance and sagacity in seeking it. We must treat moral more as we treat physical distempers. Week after week the mother sits by the sick-bed, and welcomes fasting and vigils; her watchfulness surrounds her child, and with all the means and appliances that wealth or life can command, she strives to bar up every avenue through which death can approach him. Did mothers care as much for the virtues and moral habits as for the health and life of their offspring, would they not be as patient, as hopeful, and

as long-suffering in administering antidote and remedy to a child who is morally, as to one who is physically, diseased?

Is it not in the way above described,—after a slowly brightening twilight of weeks, perhaps of months,—that the oculist, at last, lets in the light of the meridian sun upon the couched eye? Is it not in this way, that the convalescent of a fevered bed advances, from a measured pittance of the weakest nutrition, to that audacious health which spurns at all restraints upon appetite, whether as to quantity or quality? For these healings of the diseased eye or body, we demand the professional skill and science of men, educated and trained to the work; nay, if any impostor or empiric wantonly tampers with eye or life, the injured party accuses him, the officers of the law arrest him, the jurors upon their oaths convict him, the judges pass sentence, and the sheriff executes the mandates of the law;—while parties, officers, jurors, judges, and sheriffs, with one consent, employ teachers to direct and train the godlike faculties of their children, who never had one hour of special study, who never received one lesson of special instruction, to fit them for their momentous duties.

If, then, the business of education, in all its departments, be so responsible; if there be such liability to excite and strengthen any one faculty of the opening mind, instead of its antagonist; if there be such danger of promoting animal and selfish propensities into command over social and moral sentiments; if it be so easy for an unskillful hand to adjust opportunity to temptation in such a way that the exposed are almost certain to fall; if it be a work of such delicacy and difficulty to reclaim those who have wandered; if, in fine, one, not deeply conversant with the human soul, with all its various faculties and propensities, and with all the circumstances and objects which naturally excite them to activity, is in incomparably greater danger of touching the wrong spring of action, than one unacquainted with music is of touching the wrong key or chord of the most complicated musical instrument,—then, ought not every one of those who are installed into the sacred office of teacher, to be "a workman who needeth not to be ashamed?" Surely, they should know, beforehand, how to touch the right spring, with the right pressure, at the right time.

There is a terrible disease that sometimes afflicts individuals, by which all the muscles of the body seem to be unfastened from the volitions of the mind, and then, after being promiscuously transposed, to be refastened; so that a wrong pair of muscles is attached to every volition. In such a case, the afflicted patient never does the thing he intends to do. If he would walk forward, his will starts the wrong pair of muscles, and he walks backward. When he would extend his right arm to shake hands with you, in salutation, he starts the wrong pair of muscles, thrusts out his left, and slaps or punches you. Precisely so is it with the teacher who knows not what faculties of his pupils to exercise, and by what objects, motives, or processes, they can be brought into activity. He is the *will* of the school; they are the *body* which that will moves; and, through ignorance, he is perpetually applying his will to the wrong points. What wonder, then, if, spending day after day in pulling at the wrong pairs of muscles, the teacher involves the school in inextricable disorder and confusion, and, at last, comes to the conviction that they were never made to go right?

But, says an objector, can any man ever attain to such knowledge that he can touch as he should this "harp of thousand strings?" Perhaps not, I reply; but ask, in my turn, Cannot every man know better than he now does? Cannot something be done to make good teachers better, and incompetent ones less incompetent? Cannot something be done to promote the progress and to diminish the dangers of all our schools? Cannot something be done to increase the intelligence of those female teachers, to whose hands our children are committed, in the earliest and most impressible periods of childhood;—and thus, in the end, to increase the intelligence of mothers,—for every mother is *ex officio* a member of the College of Teachers? Cannot something be done, by study, by discussion, by practical observation,—and especially by the institution of Normal Schools,—which shall diffuse both the art and the science of teaching more widely through our community, than they have ever yet been diffused?

My friends, you cannot go for any considerable distance in any direction, within the limits of our beloved Commonwealth, without passing one of those edifices professedly erected for the education of our children. Though rarely an archi-

tectural ornament, yet, always, they are a moral beauty, to the land in which we dwell. Enter with me, for a moment, into one of these important, though lowly mansions. Survey those thickly seated benches. Before us are clustered the children of to-day, the men of to-morrow, the immortals of eternity! What costly works of art; what splendid galleries of sculpture or of painting, won by a nation's arms, or purchased by a nation's wealth, are comparable in value to the treasures we have in these children? How many living and palpitating nerves come down from parents and friends, and center in their young hearts! and, as they shall advance in life, other living and palpitating nerves, which no man can number, shall go out from their bosoms to twine round other hearts, and to feel their throbs of pleasure or of pain, of rapture or of agony! How many fortunes of others shall be linked with their fortunes, and shall share an equal fate. As yet, to the hearts of these young beings, crime has not brought in its retinue of fears, nor disappointment its sorrows. Their joys *are* joys, and their hopes more real than our realities; and, as visions of the future burst upon their imaginations, their eye kindles, like the young eagle's at the morning sunbeam. Grouping these children into separate circles, and looking forward, for but a few short years, to the fortunes that await them, shall we predict their destiny, in the terrific language of the poet:—

"*These* shall the fury passions tear
The vultures of the mind,
Disdainful Anger, pallid Fear,
And Shame that skulks behind.

"Ambition *this* shall tempt to rise,
Then whirl the wretch from high,
To bitter Scorn a sacrifice,
And grinning Infamy.

"The stings of Falsehood, *those* shall try,
And hard unkindness' alter'd eye
That mocks the tear it forced to flow;
And keen Remorse, with blood defiled,
And moody Madness, laughing wild,
Amid severest woe;—"

or, concentrating our whole souls into one resolve,—high and prophetically strong,—that our duty to these children *shall be done*, shall we proclaim, in the blessed language of the Savior;—"IT IS NOT THE WILL OF YOUR FATHER WHICH IS IN HEAVEN, THAT ONE OF THESE LITTLE ONES SHOULD PERISH."

indeed observance

VIII. SAXONY.

PROFESSIONAL TRAINING AND IMPROVEMENT OF TEACHERS.

In the kingdom of Saxony, the professional instruction, training and improvement of teachers, form a maked feature of the public school policy of the government.

I. No person can be licensed to teach who can not exhibit evidence of good health, and unexceptionable moral character, has not attained twenty-one years of age, has not received an education equivalent to that given in the best Burgher School, (our best Public High Schools,) passed a satisfactory examination as candidate before the provincial school-board, served two years as an assistant, and passed a second examination of a higher grade, for the post of principal teacher; or as an equivalent to the whole, he must have graduated with honor at one of the governmental Teachers' Seminaries.

II. There are seven Normal Schools for the preparation of male teachers, viz., two at Dresden, and one each, at Plauen, Grimma, Annaberg, Bautzen, and Nossen, besides, one for classical teachers in Leipsic, and one for female teachers at Calenberg, founded by the munificence of the Prince Schoenburg. The prescribed course of instruction occupies four years, the details of which will be found in the account of the Royal Seminary at Dresden. They are all *internates*, or boarding-schools.

The branches of instruction are: 1. Religion; 2. Catechism; 3. German Language and Literature; 4. Geography and History; 6. Arithmetic; 7. Geometry; 8. Pedagogy; 9. Penmanship; 10. Drawing; 11. Gymnastics; 12. Music. There are twenty-six lessons a week. Two hours of study every evening are devoted to a review of the lessons and instructions of the day, and the whole of Saturday morning to a review of the studies of the week, and the last of every month, to the studies of the month. Pupils of the two upper classes assist in teaching the classes of the model or preparatory school. These Normal Schools have been the foci of pedagogical improvement, and nearly all their teachers are graduates in high standing of the gymnasia and universities.

The Royal Seminary at Dresden was founded in 1785, by Elector Augustus IV., and formerly possessed the celebrated Dinter as one of its directors. It was intended for fifty pupils, with a staff of four officers, including the directors. All the pupils, except those whose parents live in Dresden, board and lodge in the institution with the officers. Calinisch,

one of the highest educational authorities in Germany, is vice-director. Connected with the seminary are six common schools, of the city, in which the pupils of the seminary acquire practice.

The Fletcher Seminary was founded by Baron Fletcher, in 1825, and has its own administration, although it is aided by the government. Provision is made in the institution for twenty pupils, who, for the annual charge of about $30, receive board, lodging and instruction, and in the second and third year of their course, a still larger allowance is made, especially to the poor and deserving. There is an institution for deaf mutes in the same building. This class of children in the country frequently attend the common school, whose teachers must therefore understand the methods of deaf-mute instruction.

III. The government protects the public schools from incompetent teachers, not only by providing seminaries enough to furnish an annual supply equal to the vacancies created by death and other causes, but by subjecting all candidates to a period of trial as well as of examination.

IV. When once found qualified the government fixes a salary, below which no regularly trained and appointed teacher shall be paid, but forbids his removal by any local authorities, until any complaints and charges are investigated and proved valid. Every teacher has a residence for his family.

V. The government has also established, on a foundation of 30,000 thalers, an institution, commenced in 1840, by Döhner, for superannuated teachers, and the widows and orphans of teachers. To secure the benefits of the fund, teachers of the first class, (teachers in gymnasia, real schools and seminaries,) pay at their admission 4 thalers, and annually from 4 to 8 thalers, according to their salary. Teachers of the second class, (of common schools,) pay 2 thalers, and yearly from 1 to 4 thalers, according to their salary. The State takes care of the funds, and makes up any deficiency of the revenue of the fund to meet the demand upon it, besides a contribution of 2,000 thalers toward the capital. The fund yields:— 1. To the widows of teachers of the first class, yearly, 60 thalers. 2. To orphans of teachers of the same class, 12 thalers until they reach their eighteenth year. 3. To widows of teachers of the second class, 30 thalers, and to their children 8 thalers. Teachers are thus not only provided against want while living, but from anxiety for their families, when dead, or incapacitated for active exertion. The result of these wise provisions on the part of the government, is seen in the improved and improving condition of the schools, and the higher attainments, professional skill, and social standing and influence of the teachers.

The "*Saxon Teachers' Mutual Aid Society*," including 1,575 members, assisted in 1855, over one hundred of their number incapacitated by sickness. There is also a "*Pestalozzian Association*," numbering over 2,000 teachers, which gave assistance in 1857, to 244 orphan children of teachers, in 117 families.

VI. There are provincial and general associations of teachers for mutual and professional improvement.

See National Education in Europe - Henry Barnard

ROYAL SEMINARY

FOR

TEACHERS AT DRESDEN.

The Royal Seminary, or College for Teachers, at Dresden, was founded in 1785. and celebrated its 50th commemoration day on the 31st October, 1835. and at the end of 1842, it had educated and sent out above 655 teachers, who had pursued a four years course of study and practice, a course which Mr. Kay, a graduate of Oxford, pronounces much more liberal. than nine-tenths of the undergraduates of either Oxford or Cambridge, receive. In 1843, there was one thoroughly educated and trained teacher for every 588 inhabitants. In consequence of their thorough, liberal, and practical education, the common school teachers of Saxony, occupy a social position, which is not accorded to the profession in any other country.

The number of students who attend the lectures and classes of the college, is limited to seventy; of these, sixty are lodged gratuitously in the institution; the remaining ten dwell with their parents or relations in the town. Twenty of the places in the college have been endowed by the government, and are therefore in its gift. The ablest of the candidates for admission are elected to them.

The examination of candidates for admission to the college is held every Easter. As the life in the normal college costs little or nothing, the lodging and education, if not the whole expenses, being given gratuitously; and, as a young man, who distinguishes himself in the college is certain to be chosen by some school committee afterward as teacher, there are always plenty of candidates for admission from the middle and lower classes of society. All these are subjected to a rigorous examination; their acquirements, their character, and their past life, are most carefully scrutinized; and, from among them all the most promising are chosen for preparation for the teacher's profession. No candidate can be elected who is not healthy and strong, who has not a powerful and clear voice, or who is lame, short-sighted, or deaf. Every one must be at least sixteen years old, and must present to the examiners a certificate of a medical man of freedom from all organic complaints, and of sound health.

The course of education in this college, as in all the other colleges in Saxony, is of four year's duration: no student can leave before the end of this time, and even then, he can not obtain admission into the ranks of the teachers, unless he can pass the prescribed examination for diplomas.

The students are divided into three classes; each young man remains, during the first two years of his residence, in the third and second classes; but, during his third and fourth years' residence, he pursues his studies in the first class. The staff of professors and teachers in the college consist of,—

1st. The Director, (Dr. Otto, in 1845.)
2nd. A Vice-Principal.
3rd. A Professor of Mathematics.
4th. A Professor of Music.
5th. Daily Teachers for Writing, Drawing, and Violin playing.

The director gives, every week, fourteen, the vice-principal sixteen, the third professor seventeen, and the fourth professor twenty-three hours' instruction to the students.

The following table will show what the subjects of instruction are in the college, and how the time of residence is divided between them.

TIME TABLE IN TEACHERS' COLLEGE IN DRESDEN.

Summer Half Year.			Winter Half Year.			Classes.
Number of Hours each Week in Class.			Number of Hours each Week in Class.			
I.	II.	III.	I.	II.	III.	
2	2	2	2	2	2	1. Religion.
0	1	1	2	1	1	2. Explanation of the Scriptures.
0	1	1	0	1	1	3. Scripture history.
3	1	1	3	0	0	4. Catechism.
1	0	0	1	0	0	5. Religious exhortation.
2	0	0	2	0	0	6. Pedagogy.
0	3	3	0	3	3	7. Special methods of teaching.
2	1	1	2	0	0	8. I. Rhetoric and reading exercises; II. and III. Mental calculations.
1	1	1	1	1	1	9. Recitation.
2	0	0	2	0	0	10. Natural philosophy.
0	2	2	0	2	2	11. Natural history.
0	1	1	0	1	1	12. Geography.
1	0	0	0	0	0	13. Mathematical geography.
1	1	1	1	1	1	14. History.
1	2	2	1	2	2	15. German language.
2	0	0	2	0	0	16. Latin language.
2	2	2	2	2	2	17. Writing.
?	2	1	2	2	2	18. Arithmetic.
0	1	2	0	0	0	19. Geometrical drawing.
1	0	0	1	1	1	20. Geometry.
2	2	2	2	2	2	21. Drawing.
0	0	1	1	1	2	22. Singing.
1	1	1	1	1	1	23. Choral singing.
1	1	0	0	0	0	24. Quartet singing.
2	2	2	2	2	2	25. Concert singing.
6	3	2	3	1	6	26. Organ playing; II. and III. Violin playing.
13	19	19	7	12	6	27. Preparation and exercise hours.
2	2	2	2	2	2	28. Gymnastic exercises.
52	51	50	42	40	40	Total number of hours per week.

The students rise in summer at 5 o'clock, and in winter at 6 o'clock, in the morning: as soon as they are dressed, they meet in one of the class-rooms, where the director reads the morning prayers; their hours of study are from 7 to 12 A. M., and from 2 to 5 P. M.

Connected with the college is a primary school for children of that district of the city, in which the college is situated: this school is under the direction of a regularly appointed and experienced teacher, and is attended by 105 children, who are divided into three classes, to each of which is assigned a separate class-room in one part of the college buildings. In these classes, a certain number of students from the college first practice teaching under the eye, and aided by the advice of the teacher.

At the end of this long and careful preparation, they are called before the board of examiners. If the young man is a Protestant, his religious examination is conducted by the board of examiners themselves; but if he is a Romanist, a priest is joined to the board, and conducts the religious part of the examination.

The examination last *three* days.

On the first day the subjects are—

From 1 to 10 o'clock, A. M. Scripture history.
" 10 to 12 " " Pedagogy.
" 2 to 4 " P. M. Mathematics and the theory of music.

The answers to the questions of the first day's examination are given in writing.

On the second day the subjects are—

From 7 to 11 o'clock, A. M. { Catechising a class of village school children on some subject of elementary instruction.

" 11 to 12 " " { Reading;
Arithmetic; and
An object lesson given to school children.

" 1 to 2 " P. M. { A *vivâ voce* examination—
In religion;
The Scriptures;
Luther's catechism; and
Pedagogy.

" 4 to 5 " " { German language;
Logic; and
Psychology.

" 5 to 6 " " { History;
Geography;
Natural philosophy; and
Natural history.

On the third day the subjects of examination are—

Organ playing;
Singing;
Piano-forte; and
Violin.

If the young candidate, who had been educated for FOUR years in a teachers' college, can not pass this examination so as to satisfy the examiners, he is obliged to continue his studies until he can do so. But if he passes the examination in a satisfactory manner, the examiners grant him a diploma, which is marked "excellent," "good," or "passable," according to the manner in which he acquitted himself in his examination.

If the young candidate does not obtain a certificate marked "excellent," but only one marked "good," or "passable," he can not officiate as teacher, until he has spent two years in some school as assistant to an experienced teacher.

At the end of this time, he is obliged again to present himself to the board of examiners, who examine him again in the most careful and searching manner. If he passes this examination, he receives another diploma marked "excellent," "good," or "passable," according to his merit, and if he obtains a diploma marked "excellent" he is enrolled among the members of the teachers' profession, and is allowed to officiate either as a private tutor or as a village teacher. But if he can not obtain this diploma, he is obliged to continue to act as an assistant teacher until he can do so. Seminar Director Dr. Otto, the principal of the normal college, and a member of the board of examiners, assured me, that it was a common thing for candidates to be examined four or five times, before they succeeded in obtaining a teachers' diploma. When they have at last succeeded, they, as well as those, who obtained the diploma marked "excellent" in the first examination, are eligible as teachers.

The school committee of the different parishes elect their own teachers. The only condition, to which this right is subjected, is, that they may not elect any person, who has not obtained a diploma of competence from the board of examiners.

When a teacher dies or vacates his situation, the school committee is required by law to elect another within two months to fill his place. All candidates for the vacant office are examined in the presence of the school committee and of those

inhabitants of the parish or town who desire to be present; and after the examination, the school committee proceed to elect the candidates whom they consider the best qualified to fill the vacant situation. But even after this examination before the parochial or municipal school authorities, the successful candidate is generally obliged to present himself to another committee in Dresden, called the Landconsistorium, for examination, before he can finally be inducted into his hard-won office. Such is the great the seemingly exaggerated precautions, which are taken by the Saxon people to secure good and efficient teachers for the schools. If, at any of these different examinations, any thing is discovered against the moral or religious character of the candidate, he is immediately rejected. His moral as well as his religious character is carefully scrutinized before his reception into the Training College, and by each of the different bodies of examiners, before whom he is obliged afterward to appear. If his previous life can not bear this scrutiny, or if the principal or professors of his college can not bear testimony to his morality and to his religious demeanor during his residence, he is rejected, and is not permitted to enter the profession.

It is easy to perceive how high a teacher, who has passed all these examinations and scrutinies, must stand in the estimation of his country and of those who surround him more immediately. As Dr. Otto said to me, "The great number of examinations, that a young man must pass through, before he can become a teacher, is important, not only in preventing any unworthy person ever being admitted into the teachers' profession, but also, and more especially, in raising the profession in the estimation of the public. The people have a great respect for men, who have, as they know, passed so many and such severe examinations. They attend with more attention and respect to their counsels and instruction." And certainly, until the teacher is respected by the people, his teaching will be productive of but little profit. To be a teacher in Germany is necessarily to be a man of learning and probity. None but such a person can be a teacher. Can we say the same in England? How many of our teachers are only uninstructed women, or poor uneducated artizans; or rude and unlettered pedagogues; or even immoral and low-minded men? How many have never been educated in any thing more than reading, writing, and a little ciphering? How many have never been into a teacher's college? How many have only been instructed in such a college for the ridiculously short period of six months? How many have never been educated at all? And yet over Germany, Austria, Switzerland, Denmark, Holland, and France, every teacher has been carefully trained for some twelve or fourteen years, in preparation for his duties; has passed at least two, generally three, and often four years, in a teachers' college, under the instruction of learned and high-minded men, conscious of the importance of their work; has passed with credit several severe examinations, and has only finally been received into the teachers' profession, after a most careful scrutiny into his character and accomplishments has given an assurance to his country of his fitness for the important duties of his profession.

But strange and humiliating as is the contrast between the care, that is taken in Saxony and in England to prepare and elect efficient teachers for the village schools, the contrast between the situations of the teachers in the two countries, after election, is no less sad. In Saxony, as indeed throughout Germany, Switzerland, Holland, Denmark, and France, great pains are taken to make the teacher's rank in society, and his situation, worthy the acceptance of an educated man. The teacher is never left dependent upon uncertain charity. If his salary is sometimes small, it is at least fixed and certain. The minimum is fixed by goverment, and no parish or town-committee may offer less than this salary to its teacher. Moreover, the teacher is never degraded into being his own tax-gatherer. The parish or town is obliged to arrange with the teacher, before his appointment, how much he shall receive, when he shall receive it, and how he shall receive it. The committee is obliged to collect the funds necessary for cleansing, warming, repairing, and furnishing the school-buildings, *and for paying the teachers.* If they neglect to pay the teacher regularly, he can always appeal to the county magistrates, who oblige the parochial or town-committee to perform its duty.

When a teacher has become too old, or too weak to perform all his accustomed duties in the school-room, the inspector of the district decides, whether he shall

be dismissed with a pension; or, whether the committee shall engage an assistant teacher, to aid him in the school-room. The widows and children of deceased teachers are pensioned off in Saxony, in the same manner as in Prussia, and the funds for this purpose are raised by the same means.

Another most important regulation is, that no person or persons in immediate personal connection with a teacher, shall have the power of dismissing him, after he is once elected. It must be evident to all, how much this is tending to lower the independence and respectability of the teachers of England. A private patron, a clergyman, or a committee of parishioners has the power in almost every case, in our country, of dismissing a teacher. How often this has been done merely on account of some personal pique, or because the teacher would not submit to their crude notions of how a school ought to be managed; or from misrepresentation; or from mere village squabbles, I have no need to remind any of my readers. That such a dismissal is possible, every one will admit. How such a possibility must often damp a good and earnest teacher's energy, or undermine his honesty and destroy his usefulness, or at least lower his profession in the eyes of the people around him, is but too evident. But in Germany, no person in immediate connection with the teacher can dismiss him on any pretext whatsoever. His judges are distant, unprejudiced, and impartial persons. In Saxony, after the parish has elected its teacher, it loses all direct power over him. The parochial minister or committee can inspect the school, when he or they please. Indeed, it is their duty to do so at stated times. They can advise the teacher and counsel him, but they can not directly interfere with him. He is supposed to understand, how to manage his school, better than any other person in his parish. If he did not, his long preparatory training would have been of little avail.

If the clergyman, or any of the parishioners, have any cause of complaint to find with the teacher, and desire to have either dismissed or reprimanded, and obliged to change his plans of proceeding, a complaint must be made to the county educational magistrate, and by him, to the minister of education in Dresden, who, in Saxony, is the only person, who can dismiss a teacher. The county magistrate, on receiving the complaint, immediately sends an inspector to the spot, to inquire into the ground of complaint or dispute; and after having received his report, the complaint of the parish, and the defense of the teacher, sends them to the minister of education in Dresden. It remains with the minister alone to pronounce the final judgment. This impartial mode of proceeding tends to raise the teachers' profession in the eyes of the people. They see that the teachers are men, who are considered worthy of the protection and support of the government. But above all, it enables the teachers to act honestly and fearlessly, to follow out the plans they know to be the best, and to devote their whole energies and minds to their duties, without any embarrassing fears of offending employers or patrons, or of endangering their continuance in office.

There are 2,925 teachers in Saxony, or one teacher to every 588 inhabitants; which is not large enough for the wants of the country. In Saxony, as throughout Germany, they will not make any use of monitors. As they will not avail themselves of the assistance of educated monitors in the more mechanical parts of school teaching, they have therefore been obliged to adopt the following expedient. The law ordains, that when there are more than sixty children in any parochial school, and the parish can not afford to support more than one teacher, the children shall be divided into two classes, when there are not more than 100, and into three classes, when not more than 150 in number; that when there are two classes, the teacher shall instruct one in the morning, and the other in the afternoon; that when there are three classes, he shall instruct each class for three hours daily at separate times; and that all the children not under instruction shall not attend the school, while either of the other classes is there.

From inquiries made by Dr. Otto, of Dresden, it appears that 2,119 of the primary schools of Saxony receive the following salaries, independently of the lodgings, fuel, and garden, &c.: 607 receive not more than £30; 531 not more than £50; 543 not more than £71; 206 not more than £90; 78 not more than £95; 25 not more than £105; 12 not more than £120; 9 not more than £130; 7 not more than £138; 1 not more than £150.

COURSE OF INSTRUCTION

PURSUED IN THE TWO CLASSES AT THE FLETCHER NORMAL SEMINARY IN DRESDEN.

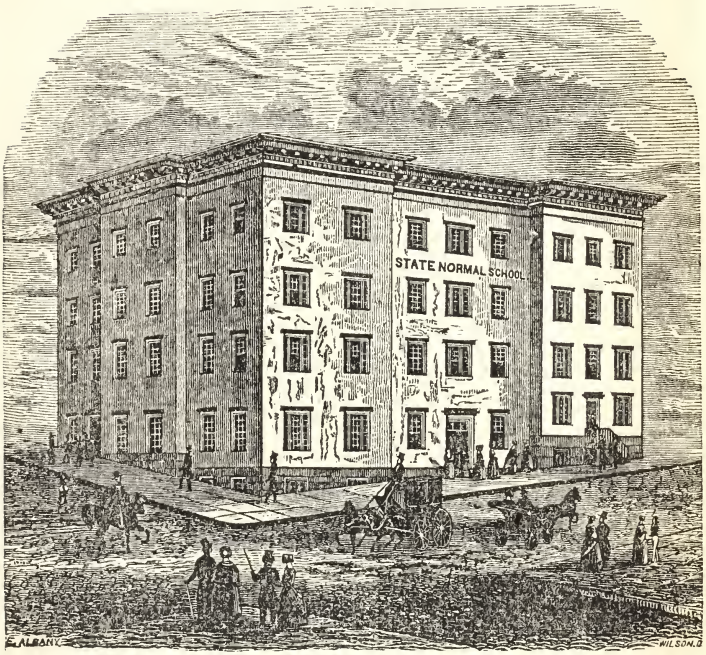
The course is of four years' duration, fresh pupils being received and departing every two years. Those that come in the fifth half year would be placed in the second class of the following scheme, and at the end of the eighth half year in the first class. Those entering in the first half year would be in the second class till the fifth half year.

Subjects of Instruction.	1st Half year.		2d Half year.		3d Half year.		4th Half year.		5th Half year.		6th Half year.		7th Half year.		8th Half year.	
	1st class.	2d class.	1st class.	2d class.	1st class.	2d class.	1st class.	2d class.	1st class.	2d class.	1st class.	2d class.	1st class.	2d class.	1st class.	2d class.
1. Biblical Knowledge		4 h.								4 h.						
2. Biblical History .		4 h.		4 h.						4 h.		4 h.				
3. Bible Explanation .	2 h.		2 h.	2 h.	2 h.	2 h.	2 h.		2 h.		2 h.	2 h.	2 h.	2 h.	2 h.	
							common to both.								common to both.	
4. Catechism . . .					4 h.		4 h.						4 h.		4 h.	
					common to both.		common to both.						common to both.		common to both.	
5. Art of Questioning							2 h.								2 h.	
6. Catechetical Exercises	2 h.		2 h.		2 h.		2 h.		2 h.		2 h.		2 h.		2 h.	
7. Exercises in Thinking		2 h.								2 h.						
8. Psychology and Art of Teaching.					2 h.		2 h.						2 h.		2 h.	
					common to both.		common to both.						common to both.		common to both.	
9. School Discipline .							2 h.								2 h.	
10. General History . .											4 h.					
											common to both.					
11. German and Saxon History.			4 h.													
			common to both.													
12. Latin					3 h.								3 h.			
13. Composition . . .	2 h.		2 h.		1 h.		1 h.		2 h.		2 h.		1 h.		1 h.	
	common to both.		common to both.		common to both.		common to both.		common to both.		common to both.		common to both.		common to both.	
14. Arithmetic . . .		4 h.		4 h.		4 h.		3 h.		4 h.		4 h.		4 h.		3 h.
15. Geography . . .		3 h.		3 h.						3 h.		3 h.				
16. Natural Philosophy					2 h.		1 h.									
					common to both.		common to both.									
17. Writing		2 h.		2 h.		2 h.		2 h.		2 h.		2 h.		2 h.		2 h.
18. Violin	1 h.	1 h.	1 h.	2 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	2 h.	1 h.	1 h.	1 h.	1 h.
19. Singing	2 h.	2 h.	2 h.		2 h.		2 h.		2 h.	2 h.	2 h.		2 h.		2 h.	
			common to both.		common to both.		common to both.				common to both.		common to both.		common to both.	
20. History of the Church			2 h.		2 h.						2 h.		2 h.			
21. Geometry						3 h.		3 h.						3 h.		3 h.
22. Grammar . . .	1 h.	2 h.	1 h.	2 h.		2 h.		2 h.	1 h.	2 h.	1 h.	2 h.		2 h.		2 h.
23. Reading		2 h.		1 h.						2 h.		1 h.				
24. Natural History .													2 h.	1 h.		
													common to both.		common to both.	
25. Drawing		2 h.		2 h.		2 h.		2 h.		2 h.		2 h.		2 h.		2 h.
26. Thorough Bass . .	2 h.	1 h.	2 h.	2 h.	1 h.	2 h.	1 h.	2 h.	2 h.	1 h.	2 h.	2 h.	1 h.	2 h.	1 h.	2 h.
27. Organ	2 h.	2 h.	2 h.	2 h.	1 h.	2 h.	1 h.	2 h.	2 h.	2 h.	2 h.	2 h.	1 h.	2 h.	1 h.	2 h.
28. Piano	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.	1 h.

NOTE.—h. stands for the hours devoted to each subject of instruction during the week.

IX. NEW YORK STATE NORMAL SCHOOL

AT ALBANY.



The Normal School for the state of New York, was established by an act of the Legislature in 1844, "for the instruction and practice of Teachers of Common Schools, in the science of Education and the art of Teaching." It was first established for five years, as an experiment, and went into operation on the 18th of December, 1844, in a building provided gratuitously by the city of Albany, and temporarily fitted up for that purpose. In 1848, an act was passed by the Legislature "for the permanent establishment of the State Normal School," appropriating $15,000 toward the erection of a suitable building. The following year an additional appropriation of $10,000 was made for its completion. A large and commodious edifice, (*See* Fig. 1, 2, 3, 4, 5, 6,) containing a dwelling-house for the Principal, has accordingly been erected on the corner of Lodge and Howard streets, adjoining the State Geological and Agricultural Rooms. To this building the school was removed on the 31st of July, 1849. At the expiration of the term of five years for which this institution was originally established, and in connection with the closing exercises of the Summer

Session ending September 27, 1849, Samuel S. Randall, Esq., Deputy Superintendent of Common Schools, pronounced an address in which the origin and progress of the Normal School is thus graphically set forth:

For several years prior to 1844, the attention of the friends of Common School education in this state had been strongly directed to the inadequacy of the existing agencies for the preparation of duly qualified teachers for our elementary institutions of learning. Liberal endowments had, from time to time, during a long series of years, been bestowed upon the academies in different sections of the state, with a view to the attainment of this object; but the practical inability of these institutions to supply the demand thus made upon them with all the resources at their command, soon became obvious and undeniable. The establishment of Normal Schools for this special and exclusive purpose in various portions of Europe, where popular education was most flourishing, and in the adjoining state of Massachusetts, long and honorably distinguished for her superior public and private schools, and the manifest tendency of these institutions to elevate and improve the qualifications and character of teachers, had begun to attract the regard of many of our most distinguished statesmen.

On a winter's afternoon, early in the year 1844, in a retired apartment of one of the public buildings in this city, might have been seen, in earnest and prolonged consultation, several eminent individuals whose names and services in the cause of education are now universally acknowledged. The elder of them was a man of striking and venerable appearance—of commanding intellect and benignant mien. By his side sat one in the prime and vigor of manhood, whose mental faculties had long been disciplined in the school of virtuous activity, and in every lineament of whose countenance appeared that resolute determination and moral power, which seldom fails to exert a wide influence upon the opinions and actions of men. The third in the group was a young man of slight frame and pale, thoughtful visage; upon whose delicate and slender form premature debility had palpably set its seal; yet whose opinions seemed to be listened to by his associates with the utmost deference and regard. The remaining figure was that of a well-known scholar and divine, whose potent and beneficial influence had long been felt in every department of the cause of popular education, and whose energy, activity and zeal had already accomplished many salutary and much needed reforms in our system of public instruction.

The subject of their consultation was the expediency and practicability of incorporating upon the Common School system of this state an efficient instrumentality for the education of teachers. The utility of such a measure, and its importance to the present and prospective interests of education, admitted, in the minds of these distinguished men, of no doubt. The sole question was whether the public mind was sufficiently prepared for its reception and adoption: whether an innovation so great and striking, and involving as it necessarily must a heavy and continued expenditure of the public money, might not be strenuously and successfully resisted: and whether a premature and unsuccessful attempt then to carry into execution a measure of such vital importance, might not be attended with a disastrous influence upon the future prospects of the cause of education. These considerations after being duly weighed, were unanimously set aside by the intrepid spirits then in council; and it was determined that, backed by the strong and decided recommendation of the head of the Common School Department, immediate measures should be forthwith adopted for the establishment of a STATE NORMAL SCHOOL. The men who thus gave the first decided impetus to the great enterprise, whose gratifying results are now before us, were SAMUEL YOUNG, CALVIN T. HULBURD, FRANCIS DWIGHT, and ALONZO POTTER.

Mr. Hulburd, the able and enlightened Chairman of the Committee on Colleges, Academies and Common Schools, of the Assembly, visited the Normal Schools of Massachusetts, and after a thorough examination of their merits and practical operations, submitted an elaborate and eloquent report to the House, in favor of the immediate adoption of this principle in our system of public instruction. The bill introduced by him, and sustained in all its stages by his powerful influence and indefatigable exertions, and the coöperation of the most zealous friends of education throughout the state, became a law, and appropriated the sum of $10,000 annually for five successive years, for the purpose of establishing and maintaining a State Normal School in this city. The general control of the Institution was committed to the Regents of the University, by whom an Executive Committee, consisting of five persons, one of whom was to be the Superintendent of Common Schools, was to be appointed, upon whom the direct management, discipline and course of instruction should devolve.

In pursuance of this provision, the Board of Regents, in June, 1844, appointed a Committee comprising the Hon. SAMUEL YOUNG, then Superintendent of Common Schools, the Rev. ALONZO POTTER, Rev. WM. H. CAMPBELL, Hon. GIDEON HAWLEY, and FRANCIS DWIGHT, Esq. This committee forthwith entered upon the execution of their responsible duties; procured on very liberal and favorable terms from the city of Albany the lease for five years of the spacious building in State street, recently occupied by the Institution; prescribed the necessary rules and regulations for the instruction, government and discipline of the school, the course of study to be pursued, the appointment and selection of the pupils, &c., and procured the services of the late lamented and distinguished Principal, then of Newburyport, Massachusetts, together with his colleague, Prof. Perkins, of Utica, the present Principal, as teachers. On the 18th day of December, 1844, the school was opened in the presence of a large concourse of citizens and strangers, by an eloquent address from Col. YOUNG, and by other appropriate and suitable exercises. Twenty-nine pupils, thirteen males and sixteen females, representing fourteen counties only, of both sexes were in attendance, who, after listening to a brief but clear and explicit declaration from Mr. PAGE, of his objects, views and wishes in the management and direction of the high duties devolved upon him, entered at once upon the course of studies prescribed for the school. Before the close of the first term on the 11th of March, 1845, the number of pupils had increased to ninety-eight, comprising about an equal number of each sex, and representing forty of the fifty-nine counties of the state. During this term the musical department of the school was placed under the charge of Prof. ILSLEY, of this city, and instruction in drawing was imparted by Prof. J. B. HOWARD, of Rensselaer.

On the commencement of the second term, on the 9th of April, 1845, 170 pupils were in attendance, comprising a nearly equal proportion of males and females, and representing every county in the state, with a single exception. Of these pupils about nine-tenths had been previously engaged in teaching during a longer or shorter period. The term closed on the 28th of August, with a public examination and other suitable exercises, and thirty-four of the students received the certificate of the Executive Committee and Board of Instruction, as in their judgment well qualified in all essential respects, to teach any of the Common Schools of the state.

On the 15th of October succeeding, the school re-opened with 180 pupils, which was increased during the progress of the term to 198 from every county in the state but one. The death of Mr. DWIGHT, which took place on the 15th of December, and the transfer of the Rev. Dr. POTTER to the Episcopal Diocese of Pennsylvania, created vacancies in

the Executive Committee, which were supplied by the appointment of the Hon. HARMANUS BLEECKER, and the Hon. SAMUEL YOUNG, the latter gentleman having been succeeded in the office of Superintendent of Common Schools by the Hon. N. S. BENTON, of Herkimer. The sudden death of Mr. Dwight, who had taken a deep interest in the prosperity and success of the Institution, and had given to its minutest details the benefits of his supervision and constant attention, cast a deep gloom upon the inmates; and the peculiar circumstances under which it took place were strikingly indicative of the vain and illusory nature of all human expectations. For several weeks previous to his death, Mr. Dwight had manifested much interest in devising appropriate means for the celebration of the opening of the school, on the 18th of December. Alas! how little could he imagine that the long line of Normal pupils, with the children of the various public schools of the city, to whom also he had been a signal benefactor, and hundreds of his fellow-citizens should, on that day, follow his lifeless remains to their long home!

At the close of the third term, March 18, 1846, a public examination was held, which continued during four successive days, and convinced all who felt an interest in the Institution, that the work of preparation for the teacher's life was, in all respects, thorough and complete. The diploma of the Institution was conferred on forty-seven graduates. During this and the preceding term a valuable addition had been made to the Board of Instruction, by promoting to the charge of several of the principal departments, those graduates of the Institution who now so ably and successfully preside over these departments. The Experimental School, organized at the commencement of the second term, was placed under the general supervision of its present teacher, and has proved an exceedingly valuable auxiliary in the practical preparation of the pupils of the principal school for the discharge of their duty as teachers. Two hundred and five pupils were in attendance at the commencement of the fourth term, on the first Monday of May, 1846, of whom sixty-three received a diploma at its close in September following. During the fifth term, commencing on the second of November, one hundred and seventy-eight pupils only appeared, forty-six of whom graduated in March, 1847. At the commencement, however, of the sixth term in May subsequently, two hundred and twenty-one pupils were in attendance, of whom sixty-four received the diploma of the Institution in September; and at the reopening of the school in November, two hundred and five pupils appeared. Up to this period the number of names entered on the Register of the school as pupils, including those in attendance at the commencement of the seventh term, was seven hundred and thirty-seven. Of these two hundred and fifty-four had received their diploma as graduates, of which number two hundred and twenty-two were actually engaged in teaching in the Common Schools of the state; and the residue, with few exceptions, in the different academies or in private schools. Of those who had left the school without graduating, nearly all were engaged during a longer or shorter period in teaching in the several Common Schools.

And now came that dark and gloomy period when the hitherto brilliant prospects of the Institution were overcast with deep clouds of melancholy and despondency—when that noble form and towering intellect which, from the commencement of the great experiment in progress, had assiduously presided over and watched its development, was suddenly struck down by the relentless hand of the great destroyer—when the bereaved and stricken flock, deprived of their revered and beloved guide, teacher, friend, mournfully assembled in their accustomed halls on that dreary and desolate January day at the commencement of the year 1848, to pay the last sad obsequies to the remains of their departed Principal. In the prime and vigor of his high faculties—in the meridian brightness of his

lofty and noble career—in the maturity of his well-earned fame as "first among the foremost" of the teachers of America, he passed away from among us, and sought his eternal reward in that better land where the ills and the obstructions of mortality are forever unknown; where the emancipated spirit, freed from the clogs which here fetter its high action and retard its noblest development, expands its illimitable energies in the congenial atmosphere of infinite knowledge and infinite love. It is not for me, on the present occasion, to pronounce his eulogy, although I knew and loved him well. That has already been done by an abler hand, and it only remains to say that the impress which his masterly and well-trained mind left upon the Institution, the child of his most sanguine hopes and earnest efforts, and upon the interests of education generally throughout the state, of which he was the indefatigable promoter, has been of the most marked character, and will long consecrate his name and memory.

Since this period the progress of the Institution, under the auspices of its present enlightened Principal, and his devoted corps of assistants, has been uniformly onward and upward. At the close of the seventh term fifty pupils were graduated, and the eighth term opened with two hundred and eight, of whom forty-six received their diploma at its close. The ninth term opened on the first day of November last with one hundred and seventy-five pupils, and at its close forty-three were graduated; and the tenth term, which has now just closed, opened with upward of two hundred pupils, of whom thirty-six are now about to graduate.

The following account of the State Normal School is copied from the Annual Circular of the Executive Committee, for 1850:

"Each county in the state is entitled to send to the school a number of pupils, (either male or female,) equal to twice the number of members of the Assembly in such county. The pupils are appointed by the county and town superintendents at a meeting called by the county superintendent for that purpose. This meeting should be held and the appointment made at least two weeks before the commencement of each term, or as soon as information is received as to the number of vacancies. A list of the vacancies for each term will be published in the District School Journal, as early as the number of such vacancies can be ascertained, usually before the close of the former term.

Pupils once admitted to the school will have the right to remain until they graduate; unless they forfeit that right by voluntarily vacating their place, or by improper conduct.

Persons failing to receive appointments from their respective counties, should, after obtaining testimonials of a good moral character, present themselves the first day of the term, for examination by the Faculty. If such examination is satisfactory, they will receive an appointment from the Executive Committee, without regard to the particular county, provided any vacancies exist. In such case the pupil will receive mileage.

By an act of the Legislature, passed April 11, 1849, "every teacher shall be deemed a qualified teacher, who shall have in possession a Diploma from the State Normal School."

Qualification of Applicants. Females sent to the school must be sixteen years of age, and males eighteen.

The superintendents, in making their appointments, are urged to pay no regard to the political opinions of applicants. The selections should be made with reference to the *moral worth* and abilities of the candidates. Decided preference ought to be given to those, who, in the judgment of the superintendents, give the highest promise of becoming the most efficient teachers of common schools. It is also desirable that those only

should be appointed who have already a good knowledge of the common branches of study, and *who intend to remain in the school until they graduate.*

ENTRANCE. All the pupils, on entering the school, are required to sign the following declaration:

'*We the subscribers hereby* DECLARE, *that it is our intention to devote ourselves to the business of teaching district schools, and that our sole object in resorting to this Normal School is the better to prepare ourselves for that important duty.*'

As this should be signed in good faith on the part of the pupils, they should be made acquainted with its import before they are appointed. It is expected of the superintendents, that they shall select such as will sacredly fulfill their engagements in this particular.

Pupils on entering the school are subjected to a thorough examination, and are classified according to their previous attainments. The time required to accomplish the course will depend upon the attainments and talents of the pupil, varying from *one* to *four* terms. *Very few*, however, can expect to graduate in one term.

PRIVILEGES OF THE PUPILS. All pupils receive their tuition free. They are also furnished with the use of text-books without charge; though if they already own the books of the course, they would do well to bring them, together with such other books for reference as they may possess. Moreover, they draw a small sum from the fund for the support of the school, to defray in part their expenses.

It is proposed to apportion the sum of $1,700 among the 256 pupils, who may compose the school during the next term. 1. Each pupil shall receive three cents a mile on the distance from his county town to the city of Albany. 2. The remainder of the $1,700 shall then be divided equally among the students in attendance.

The following list will show how much a student of each county will receive, during the ensuing term:

Albany, $2.41; Allegany, $10.09; Broome, $6.76; Cattaraugus, $11.17; Cayuga, $7.09; Chautauque, $12.49; Chemung, $8.35; Chenango, $5.41; Clinton, $7.27; Columbia, $3.28; Cortland, $6.67; Delaware, $4.72; Dutchess, $4.66; Erie, $10.93; Essex, $6.19; Franklin, $8.77; Fulton, $3.76; Genesee, $9.73; Greene, $3.43; Hamilton, $4.87; Herkimer, $4.81; Jefferson, $7.21; Kings, $6.97; Lewis, $6.28; Livingston, $9.19; Madison, $5.44; Monroe, $8.98; Montgomery, $3,61; New-York, $6.85; Niagara, $10.72; Oneida, $5.29; Onondaga, $6.40; Ontario, $8.26; Orange, $5.44; Orleans, $10.12; Oswego, $7.21; Otsego, $4.39; Putnam, $5.59; Queens, $7.63; Rensselaer, $2.59; Richmond, $7.32; Rockland, $6.07; Saratoga, $4.78; Schenectady, $2.86; Schoharie, $3.07; Seneca, $7.54; St. Lawrence, $8.59; Steuben, $8.89; Suffolk, $9.16; Sullivan, $5.80; Tioga, $7.42; Tompkins, $7.31; Ulster, $4.15 Warren, $4.27; Washington, $3.85; Wayne, $7.84; Westchester, $6.46, Wyoming, $9.85; Yates, $7.96.

It is proper to state, that if the number of pupils is less than 256, the sum to be received will be proportionately increased. The above schedule shows, therefore, the minimum sum to be received by each pupil. His apportionment cannot be less than as above stated, and it may be more.

This money will be paid at the *close of the term.*

APPARATUS. A well assorted apparatus has been procured, sufficiently extensive to illustrate all the important principles in Natural Philosophy, Chemistry, and Human Physiology. Extraordinary facilities for the study of Physiology are afforded by the Museum of the Medical College, which is open at all hours for visiters.

LIBRARY. Besides an abundant supply of text-books upon all the branches of the course of study, a well selected miscellaneous library has been procured, to which all the pupils may have access free of charge. In the selection of this library, particular care has been exercised to procure most of the recent works upon Education, as well as several valuable standard works upon the Natural Sciences, History, Mathematics, &c. The State library is also freely accessible to all.

TERMS AND VACATIONS. The year is divided into two terms, so as to bring the vacations into April and October, the months for holding the Teachers' Institutes. This also enables the pupils to take advantage of the cheapness of traveling by the various means of water communication in the State, in going to and from the school.

The SUMMER TERM commences on the FIRST MONDAY IN MAY, and continues TWENTY WEEKS, with an intermission of one week from the first of July.

The WINTER TERM commences on the FIRST MONDAY IN NOVEMBER, and continues TWENTY-TWO WEEKS, with an intermission from Christmas to New Year's day inclusive.

PROMPT ATTENDANCE. As the school will open on Monday, it would be for the advantage of the pupils, if they should reach Albany by the Thursday or Friday preceding the day of opening. The Faculty can then aid them im securing suitable places for boarding.

As the examinations of the pupils preparatory for classification will commence on the first day of the term, it is exceedingly important that all the pupils should report themselves on the first morning. Those who arrive a day after the time, will subject not only the teachers to much trouble, but themselves also to the rigors of a private examination. After the first week, no student, except for the strongest reasons, shall be allowed to enter the school.

PRICE OF BOARD. The price of board in respectable families, varies from $1.50 to $2.00, exclusive of washing. Young gentlemen by taking a room and boarding themselves, have sustained themselves at a lower rate. This can better be done in the summer term.

The ladies and gentlemen are not allowed to board in the same families. Particular care is taken to be assured of the respectability of the families who propose to take boarders, before they are recommended to the pupils.

EXPERIMENTAL SCHOOL. Two spacious rooms in the building are appropriated to the accommodation of the two departments of this school. These two departments are under the immediate supervision of the Permanent Teacher, who is a graduate of the Normal School.

The object of this school is to afford each Normal Pupil an opportunity of practising the methods of instruction and discipline inculcated at the Normal School, as well as to ascertain his 'aptness to teach,' and to discharge the various other duties pertaining to the teacher's responsible office. Each member of the graduating class is required to spend at least two weeks in this department

In the experimental School there are ninety-three pupils between the ages of six and sixteen years. FIFTY-EIGHT of these are free pupils. The free seats will be hereafter given exclusively to fatherless children, residing in the city of Albany. This is in consideration of an appropriation by the city to defray in part the expense of fitting up one of the rooms of the school. The remaining THIRTY-FIVE pupils are charged $20 per year for tuition and use of books. This charge is made merely to defray the expense of sustaining the school."

COURSE OF STUDY.—The following is the course of study for the School; and a thorough acquaintance with the whole of it, on the part of the male pupils, is made a condition for graduating.

The School is divided into three classes, JUNIORS, MIDDLES and SENIORS. These classes are arranged in divisions to suit the convenience of recitation.

JUNIORS.

Reading and Elocution.	
Spelling.	
Orthography,	*Normal Chart.*
Writing.	
Geography and Outline Maps, (with Map Drawing,)	*Mitchell.*
Drawing, (begun.)	
Intellectual Arithmetic,	*Colburn.*
Elementary Arithmetic,	*Perkins.*
English Grammar, (begun,)	*Brown.*
History of United States,	*Willson.*
Higher Arithmetic, (begun,)	*Perkins.*
Elementary Algebra, (begun,)	*Perkins.*

MIDDLES.

Reading and Elocution.	
Spelling.	
Orthography,	*Normal Chart.*
Writing.	
Geography and Outline Maps, (with Map Drawing,)	*Mitchell.*
Drawing.	
Intellectual Arithmetic,	*Colburn.*
English Grammar,	*Brown.*
History of United States,	*Willson.*
Higher Arithmetic,	*Perkins.*
Elementary Algebra,	*Perkins.*
Human Physiology,	*Cutter.*
Geometry, (begun,)	*Perkins.*
Perspective Drawing,	*Lectures.*
Mathematical Geography and Use of Globes.	

The division of this class composed of the Juniors of the former term, will not be required to review such studies as they have already completed.

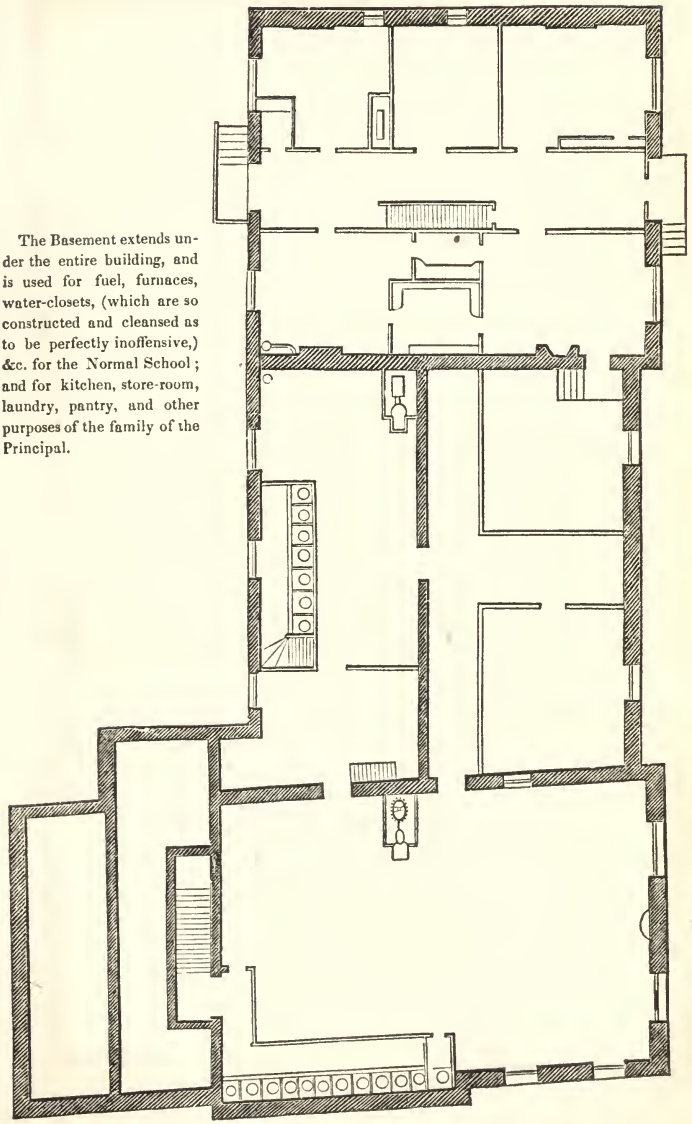
SENIORS.

Higher Algebra, Chaps. VII. and VIII, (omitting Multinominal Theorem and Recurring Series,)	*Perkins.*
Geometry, Six Books,	*Perkins' Elements.*
Plane Trigonometry, as contained in	*Davies' Legendre.*
Land Surveying,	*Davies.*
Natural Philosophy,	*Olmstead.*
Chemistry, with (Experimental Lectures,)	*Silliman.*
Intellectual Philosophy,	*Abercrombie.*
Moral Philosophy,	*Wayland, abridged.*
Rhetoric,	*Lectures.*
Constitutional Law, with select parts of the Statutes of this state, most intimately connected with the rights and duties of citizens,	*Young's Science of Government, Revised Statutes.*
Art of Teaching,	*Lectures, Theory and Practice of Teaching, and Experimental School.*
Elements of Astronomy,	*Lectures.*
Lessons in Vocal Music, to be given to all.	

The same course of study, omitting the Higher Algebra, Plane Trigonometry and Surveying, must be attained by females as a condition of graduating.

Any of the pupils who desire further to pursue mathematics, can be allowed to do so after completing the above course of study.

Fig. 2. Plan of Basement.



The Basement extends under the entire building, and is used for fuel, furnaces, water-closets, (which are so constructed and cleansed as to be perfectly inoffensive,) &c. for the Normal School; and for kitchen, store-room, laundry, pantry, and other purposes of the family of the Principal.

Fig. 3. Plan of First Floor.

A. Entrance for ma es.
B. B. B. B. B. Janitor's rooms.
C. Laboratory.
D. Apparatus-room.
E. Entrance for females.
F. Play-room and calisthenic exercise for females.
G. Reception-room and office of school.
H. Entrance into private library of Principal.
I. Dining-room of residence of Principal.
J. Parlors of Principal.
K. Entrance to residence of Principal.
r. Registers for hot air.

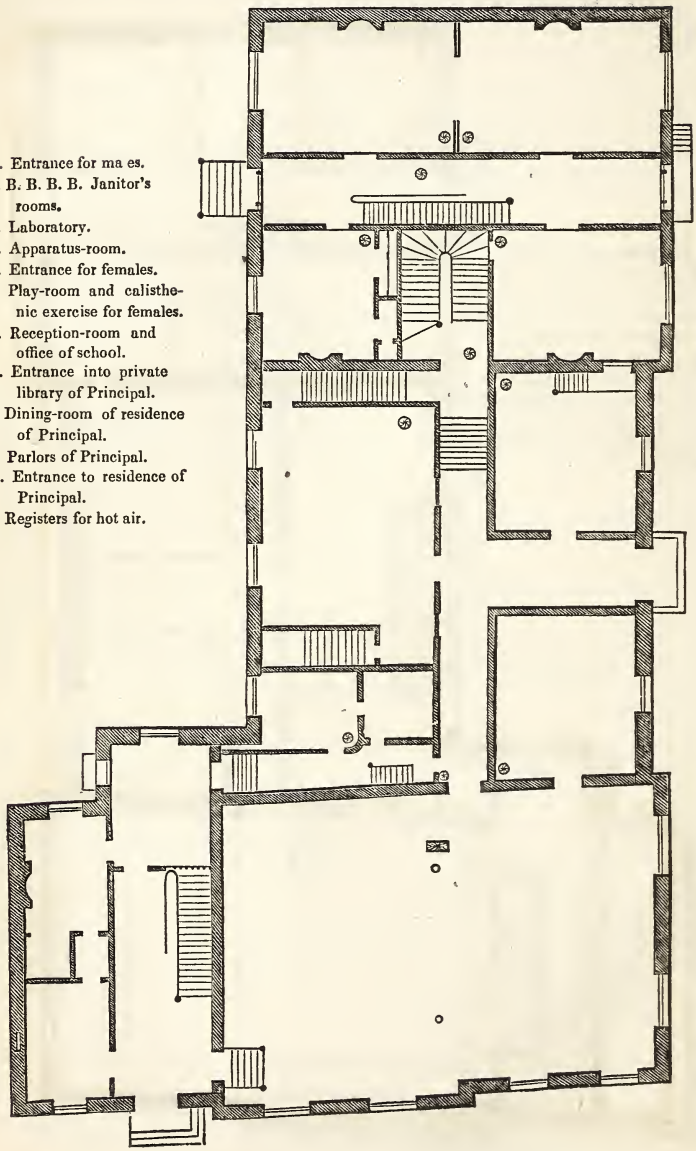


FIG. 4. PLAN OF SECOND FLOOR.

A. Clothes-room for males, N. S.
B. Philosophical apparatus.
C. Recitation-room for N. S.
D. D. D. Recitation-room for Experimental School.
E. S. Experimental School.
F. Clothes-room for boys of E. S.
G. Clothes-room for girls of E. S.
H. Clothes-room for females of N. S.
I. I. I. I. Chambers in residence of Principal.

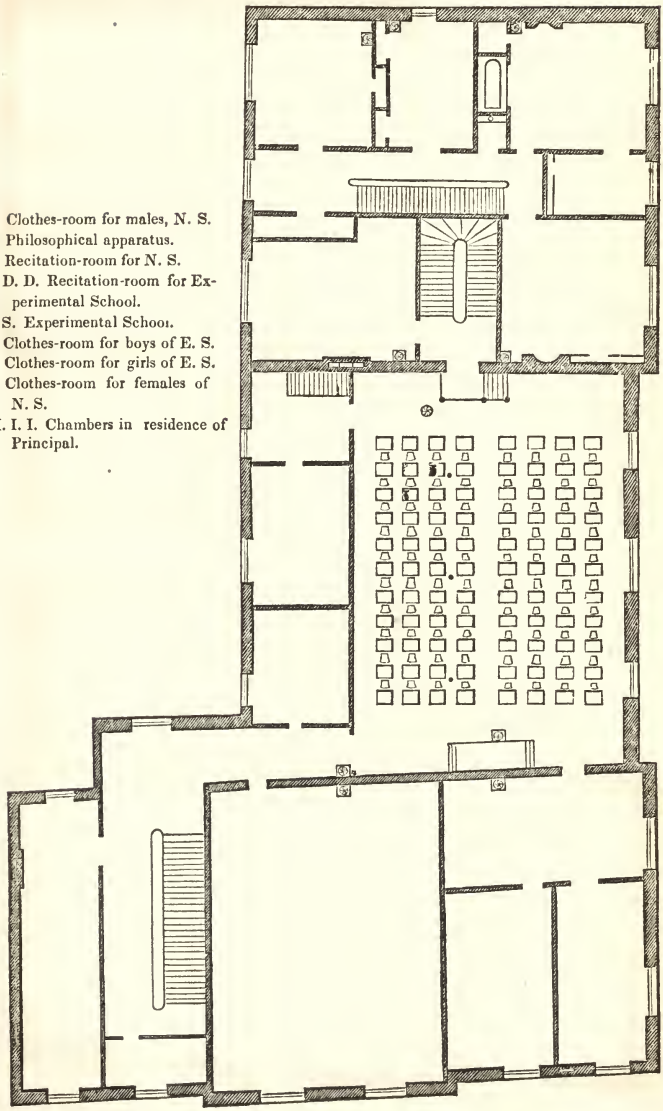


FIG. 5. PLAN OF THIRD FLOOR

A. Text book library.
B. Study-room of Normal School.
C. Desk and chairs for two pupils.
D. D. D. D. Recitation-rooms for N. S.

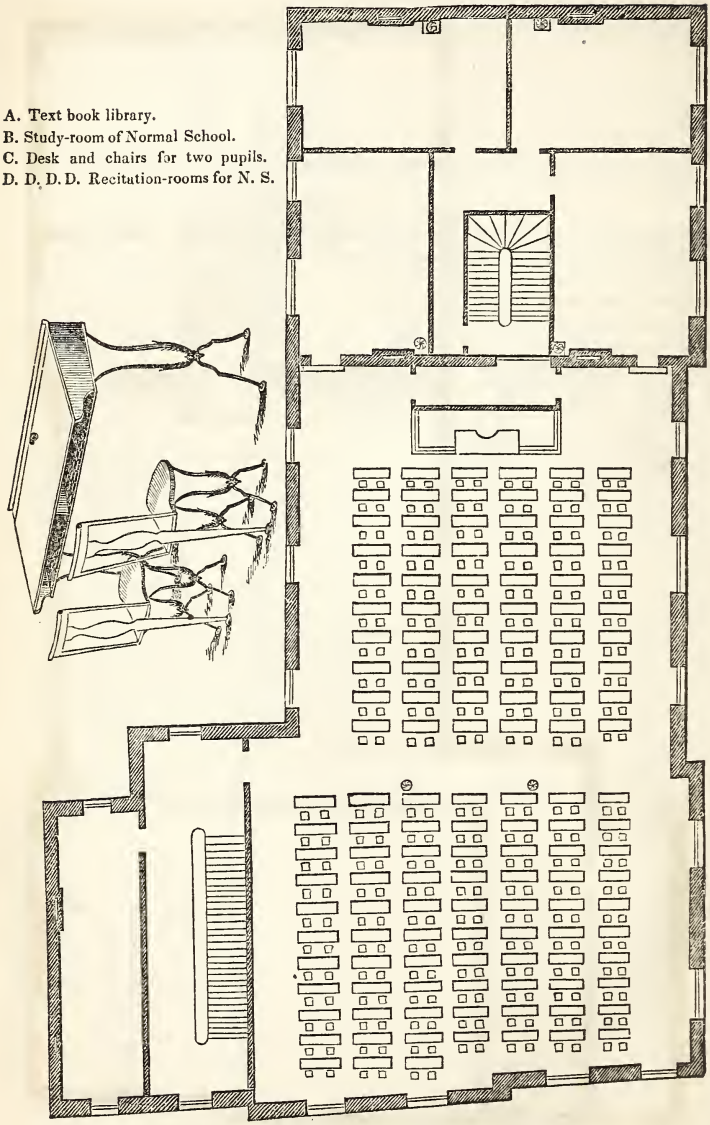
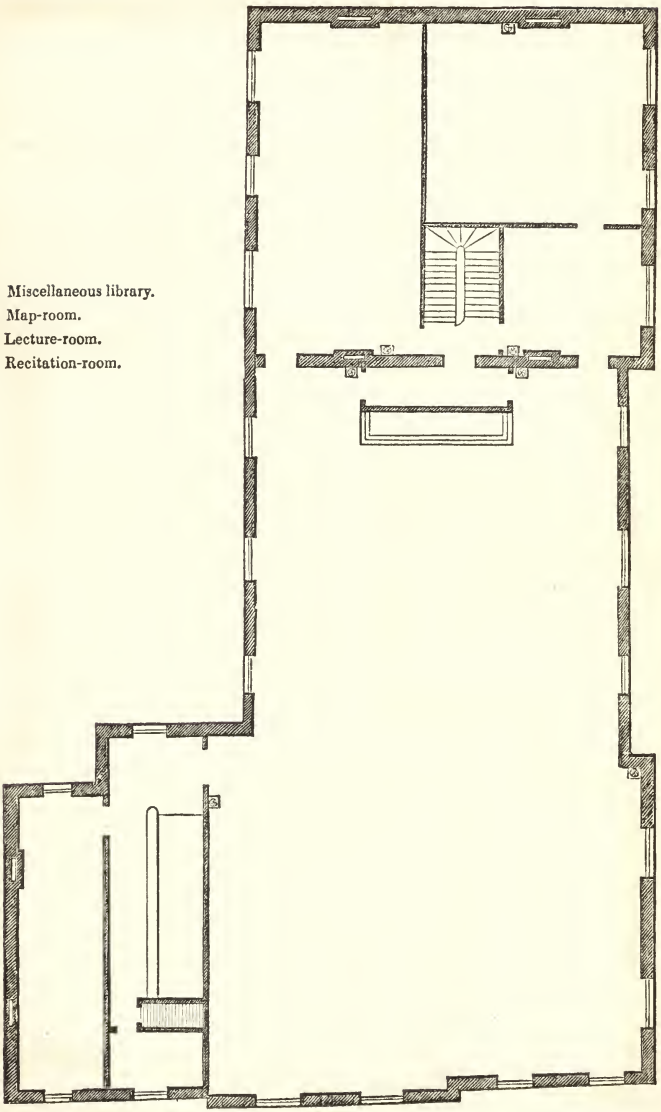


FIG. 6. PLAN OF FOURTH FLOOR.

A. Miscellaneous library.
B. Map-room.
C. Lecture-room.
D. Recitation-room.



1848 TO 1863.

On the first of January, 1848, Prof. George R. Perkins, was appointed Principal of the New York State Normal School, to fill the vacancy occasioned by the death of the lamented Page, who, in his eminent success and early death, had realized either alternative of the injunction to "succor or die," laid upon him by his friend Horace Mann, when he assumed the charge of the school. Prof. Perkins had been connected with the school since its organization. He was familiar with its workings, and the plans of Mr. Page, and his success in his department had evinced his fitness to carry the experiment of the State Normal School to a successful termination. The winter of 1852, was a crisis in its history. The appropriations for its support were made by the Legislature, annually. An occasion was thus furnished for narrow minded men to attack the system of Normal Schools, charging against it that it was unable to supply teachers to the State to such an extent as to warrant its continuance on grounds of public policy. So far were these attacks carried that formal notice was given in the Legislature of an intention to introduce a bill to repeal the law establishing the school. This, with the exception of a feeble opposition on the part of a single senator in the winter of 1853, was the last exhibition of legislative hostility. Some dissensions among the Faculty, greatly magnified, led to the appointment of a committee of inquiry in the Legislature to examine into its internal arrangements, and the general mode in which it was conducted. It was gratifying to the friends of the school that these movements failed to impair public confidence. This is clearly shown by the fact that the term which immediately succeeded them, had a larger attendance than any previous one. The severe and devoted labors of the Principal, in connection with the movements above alluded to, acting upon a constitution naturally sensitive, had so impaired his health, as to render his resignation necessary, to the deep regret of the friends of the school. The Executive Committee in their Annual Report to the Legislature, bear full testimony to his private worth and public services.

During the period of more than four years in which Prof. Perkins continued its Principal, the school enjoyed a good measure of success. The average number in attendance for each term was 216, and the whole number of graduates was 309, of whom, 146 were males, and 163 were females.

On the 20th of September, 1852, the position left vacant by the resignation of Prof. Perkins, was filled by the appointment of Samuel B. Woolworth, who for a period of twenty-two years, had been the honored Principal of one of the largest and most important Academies in the State. In this position he had fully earned the reputation of being one of the most popular, thorough, and successful educators in the country. In almost every state were men occupying high social and civil positions to whom he had given their early instructions and impulses, and whose success in life was in a great measure due to his influence. When therefore

the Executive Committee of the Normal School desired to make a selection of Principal for their Institution, they could not have labored under much embarrassment in making choice of the proper person. Upon the accession of Prof. Woolworth, some important changes were made in the organization of the school. The policy adopted soon after its commencement was to supply its teachers from among its graduates. While this policy contributed to give effect to the early plans on which the instruction was based, it failed to bring into its faculty the enlarged and liberal culture of minds trained under more rigid discipline and a wider range of study. To correct this defect, the Executive Committee resolved to establish the following professorships:

The English Language and Literature,

The Natural Sciences, and

Mathematics, pure and applied.

It was intended that those appointed to these Professorships should be thoroughly educated men, and that so far as practicable, the positions should be permanent. The influence of this plan has been most salutary. The appointments of subordinate teachers whose positions are regarded as less permanent, are still made from the graduates, so that incitements to effort for higher attainments and marked distinction, are presented to the pupils of the school.

During Dr. Woolworth's Principalship, the school seems to have been in the full tide of its prosperity. For the first time in its history, it was found necessary to dismiss those who had been appointed by the Executive Committee to fill vacancies to give room for those who had received regular appointments. The average number in attendance for each term, was 255, and the whole number of graduates was 288, of whom 193 were females, and 95 were males. In February, 1856, Dr. Woolworth resigned the position which he had held for three and one-half years, with much credit to himself and usefulness to the State, and accepted the place vacated by the death of Dr. T. Romeyn Beck. He is now the efficient Secretary of the Board of Regents of the University.

On the resignation of Dr. Woolworth, the Executive Committee appointed as his successor David H. Cochran, who was at the time occupying the position of Professor of Natural Sciences in the Institution. Previous to his connection with the Normal School, Prof. Cochran had been favorably known as Principal of an important Institution in the western part of the State. He was familiar with the management of the School, and possessed the entire confidence of its pupils, officers, and friends. Since his accession no material changes have been made in its organization. The requirements for admission have been raised, thus shortening the time previously allotted to some of the more strictly academical studies, and lengthening that assigned to the theory and practice of teaching. In addition to the Experimental School of Practice, a Model Primary School has been organized for the purpose of more thoroughly acquainting the graduates of the Normal School with the practical details

of primary teaching. This department is now in a flourishing condition. During the period that the school has been under the control of Dr. Cochran, the average number in attendance for each term has been 233, and the whole number of graduates 411, of whom 157 were males, and 254 were females.

The Normal School has now been in operation nearly nineteen years. Its present condition and the more apparent results of its working, may be gathered from the following extract from the last Annual Report of the State Superintendent of Public Instruction for the State of New York.

"During the past year, (1862,) two hundred and twenty-five applicants for admission were examined, of whom one hundred and ninety were admitted. The whole number in attendance has been two hundred and ninety-three, and of these, ninety-nine were males, and one hundred and ninety-four were females. The average age of these pupils was nineteen years and seven months: and the average period during which they had been engaged in teaching prior to their admission into the Normal School, was six months. All the counties of the State, with the exception of four, have been represented in the school."

"Since the establishment, one thousand three hundred and thirteen have enjoyed its advantages for a longer or shorter period."

"The graduates and under-graduates are represented by local school officers to be doing valuable service, not only in the schools in which they are employed, but as zealous workers, imparting their knowledge of the proper modes of instruction to their associates in teachers institutes and associations, who in turn apply the same to the schools under their charge, and thus the influence of this school is diffused."

During the first years of the existence of the school, as has been remarked, it encountered the most bitter opposition, and attempts were made to reduce the appropriation, and also to discontinue it altogether. So little were its aims and the importance of its work understood that it was deemed necessary to offer pecuniary inducements in order to secure pupils from the more remote counties of the State.

At the present time it has surmounted all opposition. In the character and work of its graduates, it has become favorably known in all counties of the State, which are now constantly represented in the school. The appropriation has been increased from $10,000 to $12,000, and each year the Superintendent of Public Instruction recommends the establishment of another similar Institution. In the language of his Report of 1862, "the permanence of this Institution may now be regarded as established, not only by legislative recognition and endowment, but also in the confidence and regards of the people."

As an evidence of this confidence, it may be mentioned here, that the Legislature in 1863, recognized the City Normal School of Oswego, as a State institution, and made an appropriation for its support.

COURSE OF STUDY AND TEXT-BOOKS IN 1863. The following is the course of study prescribed for the School; and a thorough acquaintance with the whole of it, on the part of the male pupils, is made a condition of graduation.

SUB-JUNIORS.	Text-Books.
Reading,	*Mandeville.*
Spelling.	
Elementary Sounds of the Letters,	*Page's Normal Chart.*
Writing.	
English Prose Composition,	*Quackenboss.*
Geography and Outline Maps,	*McNally.*
Intellectual Arithmetic,	*Davies.*
Elementary Arithmetic,	*Davies.*
English Grammar,	*Clark.*
History,	*Wilson.*
Chronology, Bem's system,	*Miss Peabody.*
Elementary Algebra, begun,	*Davies.*

JUNIORS.	
Intellectual Arithmetic,	*Davies.*
Practical Arithmetic,	*Davies.*
Geography and Map Drawing,	*McNally.*
Writing.	
Elementary Sounds of the Letters,	*Page's Normal Chart.*
Reading,	*Mandeville.*
History,	*Wilson.*
English Grammar,	*Clark and Brown.*
Elementary Algebra,	*Davies.*

SUB-SENIORS.	
Book Keeping,	*Palmer.*
Higher Arithmetic,	*Davies' University.*
Geometry, six books,	*Davies' Legendre.*
Rhetoric,	*Day.*
Drawing.	
Elementary Algebra, reviewed,	*Davies.*
Natural Philosophy,	*Gray.*
Perspective Drawing,	*Lectures.*
Mathematical Geography and use of Globes,	*Lectures.*
Constitutional Law, with select parts of the R. Statutes most intimately connected with the rights and duties of citizens,	*Young's Science of Government; Revised Statutes.*

SENIORS.	
Grammatical Analysis,	*Clark.*
Higher Algebra,	*Davies' Bourdon.*
Plane Trigonometry, as contained in	*Davies' Legendre.*
Surveying and Mensuration,	*Davies.*
Physiology,	*Hooker.*
Astronomy,	*Brocklesby.*
Intellectual Philosophy,	*Chaplain.*
Moral Philosophy,	*Wayland.*
Chemistry,	*Silliman.*
Agricultural Chemistry,	*Norton.*
Geology,	*Wells.*
Art of Teaching,	*Lectures, Page, Russel, and attendance in the Experimental and Primary Schools.*

The studies of the Junior class are designed to prepare a higher order of teachers for the common schools generally; those who are looking for schools of a still better grade, have before them the Sub-Senior course; and for those who aim at more important positions in the higher schools, or at principalships, the Senior studies are believed to be none too complete or severe.

X. THOUGHTS ON EDUCATION.

BY JOHN LOCKE.

(Continued from Page 284, No. XXVII.)

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RULES.

58. And here give me leave to take notice of one thing I think a fault in the ordinary method of education; and that is, the charging of children's memories, upon all occasions, with rules and precepts which they often do not understand, and are constantly as soon forgot as given. If it be some action you would have done, or done otherwise, whenever they forget or do it awkwardly, make them do it over and over again, till they are perfect, whereby you will get these two advantages: First, to see whether it be an action they can do, or is fit to be expected of them. For sometimes children are bid to do things which upon trial, they are found not able to do, and had need be taught and exercised in, before they are required to do them. But it is much easier for a tutor to command than to teach. Secondly, another thing got by it will be this, that by repeating the same action till it be grown habitual in them, the performance will not depend on memory, or reflection, the concomitant of prudence and age, and not of childhood; but will be natural in them. Thus, bowing to a gentleman when he salutes him, and looking in his face when he speaks to him, is by constant use as natural to a well-bred man, as breathing; it requires no thought, no reflection. Having this way cured in your child any fault, it is cured forever; and thus, one by one, you may weed them out all, and plant what habits you please.

59. I have seen parents so heap rules on their children, that it was impossible for the poor little ones to remember a tenth part of them, much less to observe them. However, they were either by words or blows corrected for the breach of those multiplied and often very impertinent precepts. Whence it naturally followed, that the children minded not what was said to them when it was evident to them, that no attention they were capable of, was sufficient to preserve them from transgression, and the rebukes which followed it.

Let therefore your rules to your son be as few as is possible, and rather fewer than more than seem absolutely necessary. For if you burden him with many rules, one of these two things must necessarily follow; that either he must be very often punished, which will be of ill consequence, by making punishment too frequent and familiar, or else you must let the transgressions of some of your rules go unpunished, whereby they will of course grow contemptible, and your authority become cheap to him. Make but few laws, but see they be well observed, when once made. Few years require but few laws; and, as his age increases, when one rule is by practice well established, you may add another.

HABITS.

60. But pray remember, children are not to be taught by rules, which will be always slipping out of their memories. What you think necessary for them

to do, settle in them by an indispensable practice, as often as the occasion returns, and if it be possible, make occasions. This will beget habits in them which, being once established, operate of themselves, easily and naturally, without the assistance of the memory. But here let me give two cautions: 1. The one is, that you keep them to the practice of what you would have grow into a habit in them, by kind words and gentle admonitions, rather as minding them of what they forget, than by harsh rebukes and chiding as if they were willfully guilty. 2. Another thing you are to take care of is, not to endeavor to settle too many habits at once, lest by a variety you confound them, and so perfect none. When constant custom has made any one thing easy and natural to them, and they practice it without reflection, you may then go on to another.

This method of teaching children by a repeated practice, and the same action done over and over again, under the eye and direction of the tutor, till they have got the habit of doing it well, and not by relying on rules trusted to their memories, has so many advantages, which way soever we consider it, that I can not but wonder (if ill customs could be wondered at in any thing,) how it could possibly be so much neglected. I shall name one more that comes now in my way. By this method we shall see, whether what is required of him be adapted to his capacity, and any way suited to the child's natural genius and constitution, for that too must be considered in a right education. We must not hope wholly to change their original tempers, nor make the gay pensive and grave, nor the melancholy sportive, without spoiling them. God has stamped certain characters upon men's minds, which, like their shapes, may perhaps be a little mended, but can hardly be totally altered and transformed into the contrary.

He, therefore, that is about children, should well study their natures and aptitudes, and see, by often trials, what turn they easily take, and what becomes them; observe what their native stock is, how it may be improved, and what it is fit for; he should consider what they want, whether they be capable of having it wrought into them by industry, and incorporated there by practice; and whether it be worth while to endeavor it. For, in many cases, all that we can do, or should aim at, is, to make the best of what nature has given, to prevent the vices and faults to which such a constitution is most inclined, and give it all the advantages it is capable of. Every one's natural genius should be carried as far as it could; but to attempt the putting another upon him, will be but labor in vain; and what is so plastered on, will at best sit but untowardly, and have always hanging to it the ungracefulness of constraint and affectation.

AFFECTATION.

Affectation is not, I confess, an early fault of childhood, or the product of untaught nature; it is of that sort of weeds which grow not in the wild uncultivated waste, but in garden-plots, under the negligent hand, or unskillful care of a gardener. Management and instruction, and some sense of the necessity of breeding, are requisite to make any one capable of affectation, which endeavors to correct natural defects, and has always the laudable aim of pleasing, though it always misses it; and the more it labors to put on gracefulness, the farther it is from it. For this reason it is the more carefully to be watched, because it is the proper fault of education; a perverted education indeed, but such

as young people often fall into, either by their own mistake, or the ill conduct of those about them.

He that will examine wherein that gracefulness lies, which always pleases, will find it arises from that natural coherence, which appears between the thing done, and such a temper of mind, as can not but be approved of as suitable to the occasion. We can not but be pleased with an humane, friendly, civil temper, wherever we meet with it. A mind free, and master of itself and all its actions, not low and narrow, not haughty and insolent, not blemished with any great defect, is what every one is taken with. The actions which naturally flow from such a well-formed mind, please us also, as the genuine marks of it, and being as it were, natural emanations from the spirit and disposition within, can not but be easy and unconstrained. This seems to me to be that beauty, which shines through some men's actions, sets off all that they do, and takes with all they come near, when by a constant practice they have fashioned their carriage and made all those little expressions of civility and respect, which nature or custom has established in conversation, so easy to themselves, that they seem not artificial or studied, but naturally to follow from a sweetness of mind and a well-turned disposition.

On the other side, affectation is an awkward and forced imitation of what should be genuine and easy, wanting the beauty that accompanies what is natural; because there is always a disagreement between the outward action, and the mind within, one of these two ways: 1. Either when a man would outwardly put on a disposition of mind, which then he really has not, but endeavors by a forced carriage to make show of, yet so that the constraint he is under, discovers itself, and thus men affect sometimes to appear sad, merry, or kind, when, in truth, they are not so.

2. The other is, when they do not endeavor to make show of dispositions of mind which they have not, but to express those they have by a carriage not suited to them; and such in conversation are all constrained motions, actions, words or looks which, though designed to show either their respect or civility to the company, or their satisfaction and easiness in it, are not yet natural nor genuine marks of the one or the other, but rather of some defect or mistake within. Imitation of others, without discerning what is graceful in them, or what is peculiar to their characters, often makes a great part of this. But affectation of all kinds, whencesoever it proceeds, is always offensive, because we naturally hate whatever is counterfeit, and condemn those who have nothing better to recommend themselves by.

Plain and rough nature, left to itself, is much better than an artificial ungracefulness, and such studied ways of being ill-fashioned. The want of an accomplishment, or some defect in our behavior, coming short of the utmost gracefulness, often escapes observation and censure. But affectation in any part of our carriage, is lighting up a candle to our defects, and never fails to make us taken notice of, either as wanting sense, or wanting sincerity. This governors ought the more diligently to look after, because, as I have observed, it is an acquired ugliness, owing to mistaken education, few being guilty of it but those who pretend to breeding, and would not be thought ignorant of what is fashionable and becoming in conversation; and, if I mistake not, it has often its rise from the lazy admonitions of those who give rules, and propose examples, without joining practice with their instructions, and making their pupils

repeat the action in their sight, that they may correct what is indecent or constrained in it, till it be perfected into an habitual and becoming easiness.

MANNERS.

61. Manners, as they call it, about which children are so often perplexed, and have so many goodly exhortations made them, by their wise maids and governesses, I think, are rather to be learned by example than rules; and then children, if kept out of ill company, will take a pride to behave themselves prettily, after the fashion of others, perceiving themselves esteemed and commended for it. But if by a little negligence in this part, the boy should not put off his hat, nor make legs very gracefully, a dancing-master will cure that defect, and wipe off all that plainness of nature, which the à-la-mode people call clownishness. And since nothing appears to me to give children so much becoming confidence and behavior, and so to raise them to the conversation of those above their age, as dancing, I think they should be taught to dance, as soon as they are capable of learning it. For, though this consist only in outward gracefulness of motion, yet I know not how it gives children manly thoughts and carriage, more than anything. But otherwise I would not have little children much tormented about punctilios, or niceties of breeding.

Never trouble yourself about those faults in them which you know age will cure. And, therefore, want of well-fashioned civility in the carriage, whilst civility is not wanting in the mind, (for there you must take care to plant it early,) should be the parents' least care whilst they are young. If his tender mind be filled with a veneration for his parents and teachers, which consists in love and esteem, and a fear to offend them, and with respect and good-will to all people, that respect will of itself teach those ways of expressing it which he observes most acceptable. Be sure to keep up in him the principles of good-nature and kindness; make them as habitual as you can, by credit and commendation, and the good things accompanying that state, and when they have taken root in his mind, and are settled there by a continued practice, fear not; the ornaments of conversation, and the outside of fashionable manners, will come in their due time, if, when they are removed out of their maid's care, they are put into the hands of a well-bred man to be their governor.

Whilst they are very young, any carelessness is to be borne with in children, that carries not with it the marks of pride or ill-nature, but those, whenever they appear in any action, are to be corrected immediately, by the ways above-mentioned. What I have said concerning manners, I would not have so understood, as if I meant that those who have the judgment to do it, should not gently fashion the motions and carriage of children when they are very young. It would be of great advantage, if they had people about them from their being first able to go, that had the skill, and would take the right way to do it. That which I complain of is the wrong course that is usually taken in this matter. Children who were never taught any such thing as behavior, are often (especially when strangers are present) chid for having some way or other failed in good manners, and have thereupon reproofs and precepts heaped upon them, concerning putting off their hats, or making of legs, &c. Though in this those concerned pretend to correct the child, yet in truth, for the most part, it is but to cover their own shame, and they lay the blame on the poor little ones, sometimes passionately enough, to divert it from themselves, for fear the bystanders should impute to their want of care and skill the child's ill behavior.

For, as for the children themselves, they are never one jot bettered by such occasional lectures; they at other times should be shown what to do, and by reiterated actions be fashioned before-hand into the practice of what is fit and becoming, and not told, and talked to do upon the spot, what they have never been accustomed to, nor know how to do as they should; to hare and rate them thus at every turn, is not to teach them, but to vex and torment them to no purpose. They should be let alone, rather than chid for a fault, which is none of theirs, nor is in their power to mend for speaking to. And it were much better their natural, childish negligence, or plainness, should be left to the care of riper years, than that they should frequently have rebukes misplaced upon them, which neither do nor can give them graceful motions. If their minds are well disposed, and principled with inward civility, a great part of the roughness which sticks to the outside for want of better teaching, time and observation will rub off, as they grow up, if they are bred in good company; but if in ill, all the rules in the world, all the correction imaginable, will not be able to polish them. For you must take this for a certain truth, that let them have what instructions you will, and ever so learned lectures of breeding daily inculcated into them, that which will most influence their carriage, will be the company they converse with, and the fashion of those about them. Children (nay, and men too,) do most by example. We are all a sort of chameleons, that still take a tincture from things near us; nor is it to be wondered at in children, who better understand what they see than what they hear.

62. I mentioned above, one great mischief that came by servants to children, when by their flatteries they take off the edge and force of the parents' rebukes, and so lessen their authority. And here is another great inconvenience which children receive from the ill examples which they meet with amongst the meaner servants.

They are wholly, if possible, to be kept from such conversation; for the contagion of these ill precedents, both in civility and virtue, horribly infects children, as often as they come within reach of it. They frequently learn, from unbred or debauched servants, such language, untowardly tricks and vices, as otherwise they possibly would be ignorant of all their lives.

63. It is a hard matter wholly to prevent this mischief. You will have very good luck if you never have a clownish or vicious servant, and if from them your children never get any infection. But yet, as much must be done towards it as can be, and the children kept as much as may be in the company of their parents,* and those to whose care they are committed. To this purpose, their being in their presence should be made easy to them; they should be allowed the liberties and freedom suitable to their ages, and not be held under unnecessary restraints, when in their parents' or governor's sight. If it be a prison to them it is no wonder they should not like it. They must not be hindered from being children, or from playing or doing as children, but from doing ill. All other liberty is to be allowed them. Next, to make them in love with the company of their parents, they should receive all their good things there, and from their hands. The servants should be hindered from making court to them, by giving

* How much the Romans thought the education of their children a business that properly belonged to the parents themselves, see in Suetonius, August. sect. 64. Plutarch in vita Catonis Censoris; Diodorus Siculus, l. 2. chap. 3.

them strong drink, wine, fruit, playthings, and other such matters, which may make them in love with their conversation.

COMPANY.—PUBLIC SCHOOLS.

64. Having named company, I am almost ready to throw away my pen, and trouble you no farther on this subject. For since that does more than all precepts, rules, and instructions, methinks it is almost wholly in vain to make a long discourse of other things, and to talk of that almost to no purpose. For you will be ready to say, "What shall I do with my son? If I keep him always at home, he will be in danger to be my young master; and if I send him abroad, how is it possible to keep him from the contagion of rudeness and vice, which is everywhere so in fashion? In my house he will perhaps be more innocent, but more ignorant too of the world, wanting their change of company, and being used constantly to the same faces, he will, when he comes abroad, be a sheepish or conceited creature."

I confess, both sides have their inconveniences. Being abroad, it is true, will make him bolder, and better able to bustle and shift amongst boys of his own age, and the emulation of school-fellows often puts life and industry into young lads. But till you can find a school, wherein it is possible for the master to look after the manners of his scholars, and can show as great effects of his care of forming their minds to virtue, and their carriage to good breeding, as of forming their tongues to the learned languages, you must confess that you have a strange value for words, when, preferring the languages of the ancient Greeks and Romans to that which made them such brave men, you think it worth while to hazard your son's innocence and virtue, for a little Greek and Latin. For, as for that boldness and spirit, which lads get amongst their playfellows at school, it has ordinarily such a mixture of rudeness, and an ill-turned confidence, that those misbecoming and disingenuous ways of shifting in the world must be unlearned, and all the tincture washed out again, to make way for better principles, and such manners as make a truly worthy man. He that considers how diametrically opposite the skill of living well, and managing, as a man should do, his affairs in the world, is to that malapertness, tricking, or violence, learnt among school-boys, will think the faults of a privater education infinitely to be preferred to such improvements, and will take care to preserve his child's innocence and modesty at home, as being nearer of kin, and more in the way of those qualities, which make a useful and able man. Nor does any one find, or so much as suspect, that that retirement and bashfulness which their daughters are brought up in, makes them less knowing or less able women. Conversation, when they come into the world, soon gives them a becoming assurance, and whatsoever beyond that, there is of rough and boisterous, may in men be very well spared too; for courage and steadiness, as I take it, lie not in roughness and ill-breeding.

Virtue is harder to be got than a knowledge of the world, and if lost in a young man, is seldom recovered. Sheepishness and ignorance of the world, the faults imputed to a private education, are neither the necessary consequences of being bred at home, nor, if they were, are they incurable evils. Vice is the more stubborn, as well as the more dangerous evil of the two, and therefore, in the first place, to be fenced against. If that sheepish softness, which often enervates those who are bred like fondlings at home, be carefully to be avoided, it

is principally so for virtue's sake, for fear lest such a yielding temper should be too susceptible of vicious impressions, and expose the novice too easily to be corrupted. A young man before he leaves the shelter of his father's house, and the guard of a tutor, should be fortified with resolution, and made acquainted with men, to secure his virtue, lest he should be led into some ruinous course, or fatal precipice, before he is sufficiently acquainted with the dangers of conversation, and has steadiness enough not to yield to every temptation. Were it not for this, a young man's bashfulness, and ignorance of the world, would not so much need an early care. Conversation would cure it in a great measure, or, if that will not do it early enough, it is only a stronger reason for a good tutor at home. For, if pains be to be taken to give him a manly air and assurance betimes, it is chiefly as a fence to his virtue when he goes into the world, under his own conduct.

It is preposterous, therefore, to sacrifice his innocency to the attaining of confidence, and some little skill of bustling for himself among others, by his conversation with ill-bred and vicious boys, when the chief use of that sturdiness, and standing upon his own legs, is only for the preservation of his virtue. For if confidence or cunning come once to mix with vice, and support his miscarriages, he is only the surer lost, and you must undo again, and strip him of that he has got from his companions, or give him up to ruin. Boys will unavoidably be taught assurance by conversation with men, when they are brought into it, and that is time enough. Modesty and submission, till then, better fits them for instruction, and therefore there needs not any great care to stock them with confidence before-hand. That which requires most time, pains, and assiduity, is to work into them the principles and practice of virtue and good breeding. This is the seasoning they should be prepared with, so as not easily to be got out again; this they had need to be well provided with. For conversation, when they come into the world, will add to their knowledge and assurance, but be too apt to take from their virtue, which therefore they ought to be plentifully stored with, and have that tincture sunk deep into them.

How they should be fitted for conversation, and entered into the world, when they are ripe for it, we shall consider in another place. But how any one's being put into a mixed herd of unruly boys, and there learning to wrangle at trap, or rook at span-farthing, fits him for civil conversation, or business, I do not see. And what qualities are ordinarily to be got from such a troop of playfellows, as schools usually assemble together, from parents of all kinds, that a father should so much covet it, is hard to divine. I am sure, he who is able to be at the charge of a tutor, at home, may there give his son a more genteel carriage, more manly thoughts, and a sense of what is worthy and becoming, with a greater proficiency in learning into the bargain, and ripen him up sooner into a man, than any at school can do. Not that I blame the schoolmaster in this, or think it to be laid to his charge. The difference is great between two or three pupils in the same house, and three or fourscore boys lodged up and down. For, let the master's industry and skill be ever so great, it is impossible he should have fifty or an hundred scholars under his eye, any longer than they are in the school together; nor can it be expected, that he should instruct them successfully in anything but their books; the forming of their minds and manners requiring a constant attention, and particular application to every single boy, which is impossible in a numerous flock, and would be wholly in vain,

(could he have time to study and correct every one's particular defects and wrong inclinations,) when the lad was to be left to himself, or the prevailing infection of his fellows, the greatest part of the four-and-twenty hours.

But fathers, observing that fortune is often most successfully courted by bold and bustling men, are glad to see their sons pert and forward betimes, take it for a happy omen, that they will be thriving men, and look on the tricks they play their school-fellows, or learn from them, as a proficiency in the art of living and making their way through the world. But I must take the liberty to say, that he that lays the foundation of his son's fortune in virtue and good breeding, takes the only sure and warrantable way. And it is not the waggeries or cheats practiced among school-boys, it is not their roughness one to another, nor the well-laid plots of robbing an orchard together, that makes an able man; but the principles of justice, generosity, and sobriety, joined with observation and industry, qualities which I judge school-boys do not learn much of one another. And if a young gentleman, bred at home, be not taught more of them, than he could learn at school, his father has made a very ill choice of a tutor. Take a boy from the top of a grammar-school, and one of the same age, bred as he should be in his father's family, and bring them into good company together, and then see which of the two will have the more manly carriage, and address himself with the more becoming assurance to strangers. Here, I imagine, the school-boy's confidence will either fail or discredit him; and if it be such as fits him only for the conversation of boys, he had better be without it.

VICE.

Vice, if we may believe the general complaint, ripens so fast now-a-days, and runs up to seed so early in young people, that it is impossible to keep a lad from the spreading contagion, if you will venture him abroad in the herd, and trust to chance, or his own inclination, for the choice of his company at school. By what fate vice has so thriven amongst us these few years past, and by what hands it has been nursed up into so uncontrolled a dominion, I shall leave to others to inquire. I wish that those who complain of the great decay of Christian piety and virtue everywhere, and of learning and acquired improvements in the gentry of this generation, would consider how to retrieve them in the next. This I am sure, that, if the foundation of it be not laid in the education and principling of the youth, all other endeavors will be in vain. And if the innocence, sobriety, and industry of those who are coming up, be not taken care of and preserved, it will be ridiculous to expect, that those who are to succeed next on the stage, should abound in that virtue, ability, and learning, which has hitherto made England considerable in the world. I was going to add courage too, though it has been looked on as the natural inheritance of Englishmen. What has been talked of some late actions at sea, of a kind unknown to our ancestors, gives me occasion to say, that debauchery sinks the courage of men; and when dissoluteness has eaten out the sense of true honor, bravery seldom stays long after it. And I think it impossible to find an instance of any nation, however renowned for their valor, who ever kept their credit in arms, or made themselves redoubtable amongst their neighbors, after corruption had once broke through, and dissolved the restraint of discipline, and vice was grown to such a head that it durst show itself barefaced, without being out of countenance.

VIRTUE.

It is virtue, then, direct virtue, which is the hard and valuable part to be aimed at in education, and not a forward pertness, or any little arts of shifting. All other considerations and accomplishments should give way, and be postponed, to this. This is the solid and substantial good, which tutors should not only read lectures, and talk of; but the labor and art of education should furnish the mind with, and fasten there, and never cease till the young man had a true relish of it, and placed his strength, his glory, and his pleasure in it.

PRIVATE EDUCATION.

The more this advances, the easier way will be made for other accomplishments in their turns. For he that is brought to submit to virtue, will not be refractory, or resty, in anything that becomes him. And, therefore, I can not but prefer breeding of a young gentleman at home in his father's sight, under a good governor, as much the best and safest way to this great and main end of education, when it can be had, and is ordered as it should be. Gentlemen's houses are seldom without variety of company; they should use their sons to all the strange faces that come there, and engage them in conversation with men of parts and breeding, as soon as they are capable of it. And why those who live in the country, should not take them with them, when they make visits of civility to their neighbors, I know not; this I am sure, a father that breeds his son at home, has the opportunity to have him more in his own company, and there give him what encouragement he thinks fit, and can keep him better from the taint of servants, and the meaner sort of people, than is possible to be done abroad. But what shall be resolved in the case, must in great measure be left to the parents, to be determined by their circumstances and conveniences. Only I think it the worst sort of good husbandry for a father not to strain himself a little for his son's breeding, which, let his condition be what it will, is the best portion he can leave him. But if, after all, it shall be thought by some, that the breeding at home has too little company, and that at ordinary schools not such as it should be for a young gentleman, I think there might be ways found out to avoid the inconveniences on the one side and the other.

EXAMPLE.

65. Having under consideration how great the influence of company is, and how prone we are all, especially children, to imitation; I must here take the liberty to mind parents of this one thing, viz., that he that will have his son have a respect for him and his orders, must himself have a great reverence for his son. "Maxima debetur pueris reverentia." You must do nothing before him, which you would not have him imitate. If any thing escape you which you would have pass for a fault in him, he will be sure to shelter himself under your example, and shelter himself so, as that it will not be easy to come at him to correct it in him the right way. If you punish him for what he sees you practice yourself, he will not think that severity to proceed from kindness in you, or carefulness to amend a fault in him: but will be apt to interpret it the peevishness and arbitrary imperiousness of a father, who, without any ground for it, would deny his son the liberty and pleasure he takes himself. Or, if you assume to yourself the liberty you have taken, as a privilege belonging to riper years, to which a child must not aspire, you do but add new force to your exam-

ple, and recommend the action the more powerfully to him. For you must always remember, that children affect to be men earlier than is thought: and they love breeches, not for their cut or ease, but because the having them is a mark or a step towards manhood. What I say of the father's carriage before his children, must extend itself to all those who have any authority over them, or for whom he would have them have any respect.

PUNISHMENTS.

66. But to return to the business of rewards and punishments. All the actions of childishness, and unfashionable carriage, and whatever time and age will of itself be sure to reform, being, (as I have said,) exempt from the discipline of the rod, there will not be so much need of beating children as is generally made use of. To which if we add learning to read, write, dance, foreign languages, &c., as under the same privilege, there will be but very rarely any occasion for blows or force in an ingenuous education. The right way to teach them to those things is, to give them a liking and inclination to what you propose to them to be learned, and that will engage their industry and application. This I think no hard matter to do, if children be handled as they should be, and the rewards and punishments above mentioned be carefully applied, and with them these few rules observed in the method of instructing them.

TASKS.

67. 1. None of the things they are to learn should ever be made a burden to them, or imposed on them as a task. Whatever is so proposed presently becomes irksome: the mind takes an aversion to it, though before it were a thing of delight or indifferency. Let a child be but ordered to whip his top at a certain time every day, whether he has or has not a mind to; let this be but required of him as a duty, wherein he must spend so many hours morning and afternoon, and see whether he will not soon be weary of any play at this rate. Is it not so with grown men? What they do cheerfully of themselves, do they not presently grow sick of, and can no more endure, as soon as they find it is expected of them as a duty? Children have as much a mind to show that they are free, that their own good actions come from themselves, that they are absolute and independent, as any of the proudest of you grown men, think of them as you please.

DISPOSITION.

68. 2. As a consequence of this, they should seldom be put about doing even those things you have got an inclination in them to, but when they have a mind and disposition to it. He that loves reading, writing, music, &c., finds yet in himself certain seasons wherein those things have no relish to him: and, if at that time he forces himself to it, he only pothers and wearies himself to no purpose. So it is with children. This change of temper should be carefully observed in them, and the favorable seasons of aptitude and inclination be heedfully laid hold of: and if they are not often enough forward of themselves, a good disposition should be talked into them, before they be set upon any thing. This I think no hard matter for a discreet tutor to do, who has studied his pupil's temper, and will be at a little pains to fill his head with suitable ideas, such as may make him in love with the present business. By this means a great deal of time and tiring would be saved: for a child will learn three times as much when he is in tune, as he will with double the time and pains, when he goes

awkwardly, or is dragged unwillingly to it. If this were minded as it should, children might be permitted to weary themselves with play, and yet have time enough to learn what is suited to the capacity of each age. But no such thing is considered in the ordinary way of education, nor can it well be. That rough discipline of the rod is built upon other principles, has no attraction in it, regards not what humour children are in, nor looks after favorable seasons of inclination. And indeed it would be rediculous, when compulsion and blows have raised an aversion in the child to his task, to expect he should freely of his own accord leave his play, and with pleasure court the occasions of learning: whereas, were matters ordered right, learning any thing they should be taught might be made as much a recreation to their play, as their play is to their learning. The pains are equal on both sides: nor is it that which troubles them; for they love to be busy, and the change and variety is that which naturally delights them. The only odds is, in that which we call play they act at liberty, and employ their pains, (whereof you may observe them never sparing,) freely; but what they are to learn, is forced upon them; they are called, compelled, and driven to it. This is that which at first entrance balks and cools them; they want their liberty: get them but to ask their tutor to teach them, as they do often their play-fellows, instead of his calling upon them to learn; and they being satisfied that they act as freely in this as they do in other things, they will go on with as much pleasure in it, and it will not differ from their other sports and play. By these ways, carefully pursued, a child may be brought to desire to be taught any thing you have a mind he should learn. The hardest part, I confess, is with the first or eldest; but when once he is set aright, it is easy by him to lead the rest whither one will.

69. Though it be past doubt, that the fittest time for children to learn any thing is when their minds are in tune, and well disposed to it; when neither flagging of spirit, nor intentness of thought upon something else, makes them awkward and averse; yet two things are to be taken care of: 1. that these seasons either not being warily observed, and laid hold on, as often as they return; or else not returning as often as they should; the improvement of the child be not thereby neglected, and so he be let grow into an habitual idleness, and confirmed in this indisposition. 2. That though other things are ill learned when the mind is either indisposed, or otherwise taken up; yet it is of great moment, and worth our endeavors, to teach the mind to get the mastery over itself; and to be able, upon choice, to take itself off from the hot pursuit of one thing, and set itself upon another, with facility and delight; or at any time to shake off its sluggishness, and vigorously employ itself about what reason, or the advice of another, shall direct. This is to be done in children, by trying them sometimes, when they are by laziness unbent, or by avocation bent another way, and endeavoring to make them buckle to the thing proposed. If by this means the mind can get an habitual dominion over itself, lay by ideas or business, as occasion requires, and betake itself to new and less acceptable employments without reluctancy or discomposure, it will be an advantage of more consequence than Latin or logic, or most of those things children are usually required to learn.

COMPULSION.

70. Children being more active and busy in that age than in any other part of their life, and being indifferent to any thing they can do, so they may be but

doing; dancing and scotch-hoppers would be the same thing to them, were the encouragements and discouragements equal. But to things we would have them learn, the great and only discouragement I can observe is, that they are called to it; it is made their business; they are teased and chid about it, and do it with trembling and apprehension; or, when they come willingly to it, are kept too long at it, till they are quite tired; all which entrenches too much on that natural freedom they extremely affect. And it is that liberty alone, which gives the true relish and delight to their ordinary play games. Turn the tables, and you will find, they will soon change their application; especially if they see the examples of others, whom they esteem and think above themselves. And if the things which they observe others to do, be ordered so that they insinuate themselves into them, as the privilege of an age or condition above theirs; then ambition and the desire still to get forward, and higher, and to be like those above them, will set them on work, and make them go on with vigor and pleasure; pleasure in what they have begun by their own desire. In which way the enjoyment of their dearly beloved freedom will be no small encouragement to them. To all of which, if there be added the satisfaction of credit and reputation, I am apt to think there will need no other spur to excite their application and assiduity, as much as is necessary. I confess, there needs patience and skill, gentleness and attention, and a prudent conduct, to attain this at first. But why have you a tutor, if there needed no pains? But when this is once established, all the rest will follow more easily than in any more severe and imperious discipline. And I think it no hard matter to gain this point; I am sure it will not be, where children have no ill examples set before them. The great danger therefore I apprehend is only from servants, and other ill-ordered children, or such other vicious or foolish people, who spoil children, both by the ill pattern they set before them in their own ill manners, and by giving them together the two things they should never have at once; I mean, vicious pleasures and commendation.

CHIDING.

71. As children should very seldom be corrected by blows; so, I think, frequent, and especially passionate chiding, of almost as ill consequence. It lessens the authority of the parents, and the respect of the child: for I bid you still remember, they distinguish early betwixt passion and reason: and as they can not but have a reverence for what comes from the latter, so they quickly grow into a contempt of the former; or if it causes a present terror, yet it soon wears off: and natural inclination will easily learn to slight such scarecrows, which make a noise, but are not animated by reason. Children being to be restrained by the parents only in vicious (which in their tender years, are only a few,) things, a look or nod only ought to correct them, when they do amiss: or, if words are sometimes to be used, they ought to be grave, kind and sober, representing the ill, or unbecomingness of the faults, rather than a hasty rating of the child for it, which makes him not sufficiently distinguish whether your dislike be not more directed to him than his fault. Passionate chiding usually carries rough and ill language with it, which has this further ill effect, that it teaches and justifies it in children: and the names that their parents or preceptors give them, they will not be ashamed or backward to bestow on others, having so good authority for the use of them.

OBSTINACY.

72. I foresee here it will be objected to me: what then, will you have children never beaten, nor chid, for any fault? this will be to let loose the reins to all kinds of disorder. Not so much as is imagined, if a right course has been taken in the first seasoning of their minds, and implanting that awe of their parents above-mentioned. For beating, by constant observation, is found to do little good, where the smart of it is all the punishment is feared or felt in it; for the influence of that quickly wears out with the memory of it. But yet there is one, and but one fault, for which I think children should be beaten; and that is obstinacy or rebellion. And in this too I would have it ordered so, if it can be, that the shame of the whipping, and not the pain, should be the greatest part of the punishment. Shame of doing amiss, and deserving chastisement, is the only true restraint belonging to virtue. The smart of the rod, if shame accompanies it not, soon ceases, and is forgotten, and will quickly, by use, loose its terror. I have known the children of a person of quality kept in awe, by the fear of having their shoes pulled off, as much as others by apprehensions of a rod hanging over them. Some such punishment I think better than beating; for it is shame of the fault, and the disgrace that attends it, that they should stand in fear of, rather than pain, if you would have them have a temper truly ingenuous. But stubbornness, and an obstinate disobedience, must be mastered with a force and blows: for this there is no other remedy. Whatever particular action you bid him do, or forbear, you must be sure to see yourself obeyed; no quarter, in this case, no resistance. For when once it comes to be a trial of skill, a contest for mastery betwixt you, as it is, if you command, and he refuses; you must be sure to carry it, whatever blows it costs, if a nod or words will not prevail; unless, for ever after, you intend to live in obedience to your son. A prudent and kind mother, of my acquaintance, was, on such an occasion, forced to whip her little daughter, at her first coming home from nurse, eight times successively, the same morning, before she could master her stubbornness, and obtain a compliance in a very easy and indifferent matter. If she had left off sooner, and stopped at the seventh whipping, she had spoiled the child forever; and, by her unprevailing blows, only confirmed her refractoriness, very hardly afterwards to be cured: but wisely persisting, till she had bent her mind, and suppled her will, the only end of correction and chastisement, she established her authority thoroughly in the very first occasions, and had ever after a very ready compliance and obedience in all things from her daughter. For, as this was the first time, so, I think, it was the last too she ever struck her.

The pain of the rod, the first occasion that requires it, continued and increased without leaving off, till it has thoroughly prevailed, should first bend the mind and settle the parent's authority; and then gravity, mixed with kindness should for ever after keep it.

This, if well reflected on, would make people more wary in the use of the rod and the cudgel; and keep them from being so apt to think beating the safe and universal remedy, to be applied at random, on all occasions. This is certain, however, if it does no good, it does great harm; if it reaches not the mind, and makes not the will supple, it hardens the offender; and, whatever pains it has suffered for it, it does but endear to him his beloved stubbornness, which has got him this time the victory, and prepares him to contest and hope

for it for the future. Thus, I doubt not, but by ill-ordered correction, many have been taught to be obstinate and refractory, who otherwise would have been very pliant and tractable. For, if you punish a child so, as if it were only to revenge the past fault, which has raised your choler; what operation can this have upon his mind, which is the part to be amended? If there were no sturdy humor or willfulness mixed with his fault, there was nothing in it that required the severity of blows. A kind of grave admonition is enough to remedy the slips of frailty, forgetfulness, or inadvertency, and is as much as they will stand in need of But, if there were a perverseness in the will, if it were a designed, resolved disobedience, the punishment is not to be measured by the greatness or smallness of the matter wherein it appeared, but by the opposition it carries, and stands in, to that respect and submission that is due to the father's orders; which must always be rigorously exacted, and the blows by pauses laid on, till they reach the mind, and you perceive the signs of a true sorrow, shame, and purpose of obedience.

This, I confess, requires something more than setting children a task, and whipping them without any more ado, if it be not done, and done to our fancy. This requires care, attention, observation, and a nice study of children's tempers, and weighing their faults well, before we come to this sort of punishment. But is not that better than always to have a rod in hand, as the only instrument of government; and, by frequent use of it on all occasions, misapply and render inefficacious this last and useful remedy, where there is need of it? For what else can be expected, when it is promiscuously used upon every little slip? When a mistake in concordance, or a wrong position in verse, shall have the severity of the lash, in a well-tempered and industrious lad, as surely as a willful crime in an obstinate and perverse offender; how can such a way of correction be expected to do good on the mind, and set that right, which is the only thing to be looked after? and, when set right, brings all the rest that you can desire along with it.

73. Where a wrong bent of the will wants not amendment, there can be no need of blows. All other faults, where the mind is rightly disposed, and refuses not the government and authority of the father or tutor, are but mistakes, and often be over looked; or, when they are taken notice of, need no other but the gentle remedies of advice, direction, and reproof; till the repeated and willful neglect of these shows the fault to be in the mind, and that a manifest perverseness of the will lies at the root of their disobedience. But whenever obstinacy, which is an open defiance, appears, that can not be winked at, or neglected, but must, in the first instance, be subdued and mastered; only care must be had that we mistake not, and we must be sure it is obstinacy, and nothing else.

74. But since the occasions of punishment, especially beating, are as much to be avoided as may be, I think it should not be often brought to this point. If the awe I spoke of be once got, a look will be sufficient in most cases. Nor indeed should be the same carriage, seriousness, or application be expected from young children, as from those of riper growth. They must be permitted, as I said, the foolish and childish actions suitable to their years, without taking notice of them; inadvertency, carelessness, and gaiety, is the character of that age. I think the severity I spoke of is not to extend itself to such unseasonable restraints; nor is that hastily to be interpreted obstinacy or willfulness, which is the natural product of their age or temper. In such miscarriages they

are to be assisted, and helped towards an amendment, as weak people under a natural infirmity; which, though they are warned of, yet every relapse must not be counted a perfect neglect, and they presently treated as obstinate. Faults of frailty, as they should never be neglected, or let pass without minding; so, unless the will mixed with them, they should never be exaggerated, or very sharply reproved; but with a gentle hand set right, as time and age permit. By this means, children will come to see what is in any miscarriage that is chiefly offensive, and so learn to avoid it. This will encourage them to keep their wills right, which is the great business: when they find that it preserves them from any great displeasure; and that in all their other failings they meet with the kind concern and help, rather than the anger and passionate reproaches, of their tutor and parents. Keep them from vice, and vicious dispositions, and such a kind of behavior in general will come, with every degree of their age, as is suitable to that age, and the company they ordinarily converse with: and as they grow in years, they will grow in attention and application. But that your words may always carry weight and authority with them, if it shall happen upon any occasion, that you bid him leave off the doing of any even childish things, you must be sure to carry the point, and not let him have the mastery. But yet, I say, I would have the father seldom interpose his authority and command in these cases, or in any other, but such as have a tendency to vicious habits. I think there are better ways of prevailing with them; and a gentle persuasion in reasoning, (when the first point of submission to your will is got,) will most times do much better.

REASONING.

75. It will perhaps be wondered, that I mention reasoning with children: and yet I can not but think that the true way of dealing with them. They understand it as early as they do language; and if I mis observe not, they love to be treated as rational creatures sooner than is imagined. It is a pride should be cherished in them, and, as much as can be, made the greatest instrument to turn them by.

But when I talk of reasoning, I do not intend any other but such as is suited to the child's capacity and apprehension. Nobody can think a boy of three or seven years old should be argued with as a grown man. Long discourses, and philosophical reasonings, at best amaze and confound, but do not instruct, children. When I say, therefore, that they must be treated as rational creatures, I mean, that you should make them sensible, by the mildness of your carriage, and the composure, even in your correction of them, that what you do is reasonable in you, and useful and necessary for them; and that it is not out of caprice, passion, or fancy, that you command or forbid them any thing. This they are capable of understanding; and there is no virtue they should be excited to, nor fault they should be kept from, which I do not think they may be convinced of: but it must be by such reasons as their age and understanding are capable of, and those proposed always in very few and plain words. The foundations on which several duties are built, and the fountains of right and wrong, from which they spring, are not, perhaps, easily to be let into the minds of grown men, not used to abstract their thoughts from common received opinions. Much less are children capable of reasonings from remote principles. They can not conceive the force of long deductions: the reasons that move

them must be obvious, and level to their thoughts, and such as may, (if I may so say,) be felt and touched. But yet, if their age, temper, and inclinations be considered, they will never want such motives as may be sufficient to convince them. If there be no other more particular, yet these will always be intelligible, and of force, to deter them from any fault fit to be taken notice of in them, viz. that it will be a discredit and disgrace to them, and displease you.

EXAMPLES.

76. But, of all the ways whereby children are to be instructed, and their manners formed, the plainest, easiest, and most efficacious, is to set before their eyes the examples of those things you would have them do or avoid. Which, when they are pointed out to them, in the practice of persons within their knowledge, with some reflections on their beauty or unbecomingness, are of more force to draw or deter their imitation than any discourses which can be made to them. Virtues and vices can by no words be so plainly set before their understandings as the actions of other men will show them, when you direct their observation, and bid them view this or that good or bad quality in their practice. And the beauty or uncomeliness of many things, in good and ill breeding, will be better learnt, and make deeper impressions, on them, in the examples of others, than from any rules or instructions can be given about them.

This is a method to be used, not only whilst they are young; but to be continued, even as long as they shall be under another's tuition or conduct. Nay, I know not whether it be not the best way to be used by a father, as long as he shall think fit, on any occasion, to reform any thing he wishes mended in his son; nothing sinking so gently, and so deep, into men's minds, as example. And what ill they either overlook, or indulge in themselves, they can not but dislike, and be ashamed of, when it is set before them in another.

WHIPPING.

77. It may be doubted concerning whipping, when, as the last remedy, it comes to be necessary; at what times, and by whom it should be done: whether presently upon the committing the fault, whilst it is yet fresh and hot; and whether parents themselves should beat their children. As to the first; I think it should not be done presently, lest passion mingle with it; and so, though it exceed the just proportion, yet it loses of its due weight: for even children discern when we do things in passion. But, as I said before, that has most weight with them, that appears sedately to come from their parents' reason; and they are not without this distinction. Next, if you have any discreet servant capable of it, and has the place of governing your child, (for if you have a tutor, there is no doubt,) I think it is best the smart should come more immediately from another's hand, though by the parent's order, who should see it done; whereby the parent's authority will be preserved, and the child's aversion, for the pain it suffers, rather be turned on the person that immediately inflicts it. For I would have a father seldom strike his child, but upon very urgent necessity, and as the last remedy: and then perhaps it will be fit to do it so that the child should not quickly forget it.

78. But, as I said before, beating is the worst, and therefore the last, means to be used in the correction of children; and that only in cases of

extremity, after all gentler ways have been tried, and proved unsuccessful; which, if well observed, there will be very seldom any need of blows. For, it not being to be imagined that a child will often, if ever, dispute his father's present command in any particular instance; and the father not interposing his absolute authority, in peremptory rules, concerning either childish or indifferent actions, wherein his son is to have his liberty; or concerning his learning or improvement, wherein there is no compulsion to be used; there remains only the prohibition of some vicious actions, wherein a child is capable of obstinacy, and consequently can deserve beating: and so there will be but very few occasions of that discipline to be used by any one, who considers well, and orders his child's education as it should be. For the first seven years, what vices can a child be guilty of, but lying, or some ill-natured tricks; the repeated commission whereof, after his father's direct command against it, shall bring him into the condemnation of obstinacy, and the chastisement of the rod? If any vicious inclination in him be, in the first appearance and instances of it, treated as it should be, first with your wonder; and then if returning again a second time, discountenanced with the severe brow of the father, tutor, and all about him, and a treatment suitable to the state of discredit before mentioned; and this continued till he be made sensible and ashamed of his fault; I imagine there will be no need of any other correction, nor ever any occasion to come to blows. The necessity of such chastisement is usually the consequence only of former indulgences or neglects. If vicious inclinations were watched from the beginning, and the first irregularities which they caused corrected by those gentle ways, we should seldom have to do with more than one disorder at once: which would be easily set right without any stir or noise, and not require so harsh a discipline as beating. Thus, one by one, as they appeared, they might all be weeded out, without any signs or memory that ever they had been there. But we letting their faults, (by indulging and humoring our little ones,) grow up, till they are sturdy and numerous, and the deformity of them makes us ashamed and uneasy, we are fain to come to the plow and the harrow; the spade and the pick-axe must go deep to come at the roots, and all the force, skill, and diligence we can use is scarce enough to cleanse the vitiated seed-plat, overgrown with weeds, and restore us the hopes of fruits to reward our pains in its season.

79. This course, if observed, will spare both father and child the trouble of repeated injunctions, and multiplied rules of doing and forbearing. For I am of opinion, that of those actions which tend to vicious habits, (which are those alone that a father should interpose his authority and commands in,) none should be forbidden children till they are found guilty of them. For such untimely prohibitions, if they do nothing worse, do at least so much towards teaching and allowing them, that they suppose that children may be guilty of them, who would possibly be safer in the ignorance of any such faults. And the best remedy to stop them, is, as I have said, to show wonder and amazement at any such action as hath a vicious tendency, when it is first taken notice of in a child. For example, when he is first found in a lie, or any ill-natured trick, the first remedy should be, to talk to him of it as a strange monstrous matter, that it could not be imagined he would have done; and so shame him out of it.

80. It will be, (it is like,) objected, that whatsoever I fancy of the tractableness of children, and the prevalency of those softer ways of shame and commendation; yet there are many, who will never apply themselves to their

books, and to what they ought to learn, unless they are scourged to it. This, I fear, is nothing but the language of ordinary schools and fashion, which have never suffered the other to be tried as it should be, in places where it could be taken notice of. Why, else, does the learning of Latin and Greek need the rod, when French and Italian need it not? Children learn to dance and fence without whipping: nay, arithmetic, drawing, &c., they apply themselves well enough to, without beating; which would make one suspect, that there is something strange, unnatural, and disagreeable to that age in the things required in grammar-schools, or in the methods used there, that children can not be brought to, without the severity of the lash, and hardly with that too; or else, that it is a mistake that those tongues could not be taught them without beating.

81. But let us suppose some so negligent or idle, that they will not be brought to learn by the gentle ways proposed, (for we must grant that there will be children found of all tempers;) yet it does not thence follow that the rough discipline of the cudgel is to be used to all. Nor can any one be concluded unmanageable by the milder methods of government, till they have been thoroughly tried upon him; and, if they will not prevail with him to use his endeavors, and do what is in his power to do, we make no excuses for the obstinate: blows are the proper remedies for those: but blows laid on in a way different from the ordinary. He that willfully neglects his book, and stubbornly refuses any thing he can do, required of him by his father, expressing himself in a positive serious command, should not be corrected with two or three angry lashes, for not performing his task, and the same punishment repeated again and again, upon every the like default: but, when it is brought to that pass, that willfulness evidently shows itself and makes blows necessary, I think the chastisement should be a little more sedate, and a little more severe, and the whipping, (mingled with admonition between,) so continued, till the impressions of it, on the mind, were found legible in the face, voice, and submission of the child, not so sensible of the smart, as of the fault he has been guilty of, and melting in true sorrow under it. If such a correction as this tried some few times at fit distances, and carried to the utmost severity, with the visible displeasure of the father all the while, will not work the effect, turn the mind, and produce a future compliance; what can be hoped from blows, and to what purpose should they be any more used? Beating, when you can expect no good from it, will look more like the fury of an enraged enemy than the good-will of a compassionate friend; and such chastisement carries with it only provocation, without any prospect of amendment. If it be any father's misfortune to have a son thus perverse and untractable, I know not what more he can do but pray for him. But I imagine, if a right course be taken with children from the beginning, very few will be found to be such; and when there are any such instances, they are not to be the rule for education of those who are better natured, and may be managed with better usage.

TUTORS AND GOVERNORS.

82. If a tutor can be got, that, thinking himself in the father's place, charged with his care, and relishing these things, will at the beginning apply himself to put them in practice, he will afterwards find his work very easy: and you will, I guess, have your son in a little time a greater proficient in both learning and breeding than perhaps you imagine. But let him by no means beat him, at any time, without your consent and direction; at least till you have expe-

rience of his discretion and temper. But yet, to keep up his authority with his pupil, besides concealing that he has not the power of the rod, you must be sure to use him with great respect yourself, and cause all your family to do so too. For you can not expect your son should have any regard for one whom he sees you, or his mother, or others slight. If you think him worthy of contempt, you have chosen amiss; and if you show any contempt of him, he will hardly escape it from your son: and whenever that happens, whatever worth he may have in himself, and abilities for this employment, they are all lost to your child, and can afterwards never be made useful to him.

83. As the father's example must teach the child respect for his tutor; so the tutor's example must lead the child into those actions he would have him do. His practice must by no means cross his precepts, unless he intend to set him wrong. It will be to no purpose for the tutor to talk of the restraint of the passions, whilst any of his own are let loose; and he will in vain endeavor to reform any vice or indecency in his pupil which he allows in himself. Ill patterns are sure to be followed more than good rules: and, therefore, he must also carefully preserve him from the influence of ill precedents, especially the most dangerous of all, the examples of the servants; from whose company he is to be kept, not by prohibitions, for that will but give him an itch after it, but by other ways I have mentioned.

84. In all the whole business of education, there is nothing like to be less hearkened to, or harder to be well observed, than what I am now going to say; and that is that children should, from their first beginning to talk, have some discreet, sober, nay wise person about them, whose care it should be to fashion them aright and keep them from all ill, especially the infection of bad company. I think this province requires great sobriety, temperance, tenderness, diligence, and discretion; qualities hardly to be found united in persons that are to be had for ordinary salaries, nor easily to be found anywhere. As to the charge of it, I think it will be the money best laid out that can be about our children; and, therefore, though it may be expensive more than is ordinary, yet it can not be thought dear. He that at any rate procures his child a good mind, well-principled, tempered to virtue and usefulness, and adorned with civility and good breeding, makes a better purchase for him, than if he had laid out the money for an addition of more earth to his former acres. Spare it in toys and play-games, in silk and ribbons, laces and other useless expenses, as much as you please; but be not sparing in so necessary a part as this. It is not good husbandry to make his fortune rich, and his mind poor. I have often, with great admiration, seen people lavish it profusely in tricking up their children in fine clothes, lodging, and feeding them sumptuously, allowing them more than enough of useless servants; and yet at the same time starve their minds, and not take sufficient care to cover that which is the most shameful nakedness, viz., their natural wrong inclinations and ignorance. This I can look on as no other than a sacrificing to their own vanity; it showing more their pride than true care of the good of their children. Whatsoever you employ to the advantage of your son's mind will show your true kindness, though it be to the lessening of his estate. A wise and good man can hardly want either the opinion or reality of being great and happy. But he that is foolish or vicious, can be neither great nor happy, what estate soever you leave him: and I ask you whether there be not men in the world whom you had rather have your son be,

with five hundred pounds per annum, than some other you know, with five thousand pounds?

85. The consideration of charge ought not, therefore, to deter those who are able: the great difficulty will be, where to find a proper person. For those of small age, parts and virtue, are unfit for this employment: and those that have greater, will hardly be got to undertake such a charge. You must, therefore, look out early, and inquire everywhere; for the world has people of all sorts: and I remember, Montaigne says in one of his essays, that the learned Castalio was fain to make trenchers at Basil, to keep himself from starving, when his father would have given any money for such a tutor for his son, and Castalio have willingly embraced such an employment upon very reasonable terms: but this was for want of intelligence.

86. If you find it difficult to meet with such a tutor as we desire, you are not to wonder. I only can say, spare no care nor cost to get such an one. All things are to be had that way: and I dare assure you, that, if you can get a good one, you will never repent the charge; but will always have the satisfaction to think it the money, of all other, the best laid out. But be sure take no body upon friends, or charitable, no, nor bare great commendations. Nay, if you will do as you ought, the reputation of a sober man, with a good stock of learning, (which is all usually required in a tutor,) will not be enough to serve your turn. In this choice be as curious as you would be in that of a wife for him: for you must not think of trial, or changing afterwards; that will cause great inconvenience to you, and greater to your son. When I consider the scruples and cautions I here lay in your way, methinks it looks as if I advised you to something which I would have offered at, but in effect not done. But he that shall consider, how much the business of a tutor, rightly employed, lies out of the road; and how remote it is from the thoughts of many, even of those who propose to themselves this employment; will perhaps be of my mind, that one fit to educate and form the mind of a young gentleman is not everywhere to be found; and that more than ordinary care is to be taken in the choice of him, or else you may fail of your end.

87. The character of a sober man, and a scholar, is, as I have above observed, what every one expects in a tutor. This generally is thought enough, and is all that parents commonly look for. But when such an one has emptied out, into his pupil, all the Latin and logic he has brought from the university, will that furniture make him a fine gentleman? Or, can it be expected, that he should be better bred, better skilled in the world, better principled in the grounds and foundations of true virtue and generosity, than his young tutor is?

To form a young gentleman, as he should be, it is fit his governor should himself be well-bred, understand the ways of carriage, and measures of civility, in all the variety of persons, times, and places; and keep his pupil, as much as his age requires, constantly to the observation of them. This is an art not to be learnt, nor taught by books: nothing can give it but good company and observation joined together. The tailor may make his clothes modish, and the dancing-master give fashion to his motions; yet neither of these, though they set off well, make a well-bred gentleman: no, though he have learning to boot; which, if not well managed, makes him more impertinent and intolerable in conversation. Breeding is that which sets a gloss upon all his other good qualities, and renders them useful to him, in procuring him the esteem and good will

of all that he comes near. Without good breeding, his other accomplishments make him pass but for proud, conceited, vain, or foolish.

Courage, in an ill-bred man, has the air, and escapes not the opinion, of brutality: learning becomes pedantry; wit, buffoonery; plainness, rusticity; good-nature, fawning: and there can not be a good quality in him which want of breeding will not warp, and disfigure to his disadvantage. Nay, virtue and parts, though they are allowed their due commendation, yet are not enough to procure a man a good reception, and make him welcome wherever he comes. Nobody contents himself with rough diamonds, and wears them so, who would appear with advantage. When they are polished and set, then they give a lustre. Good qualities are the substantial riches of the mind; but it is good breeding sets them off: and he that will be acceptable, must give beauty as well as strength to his actions. Solidity, or even usefulness, is not enough: a graceful way and fashion, in everything, is that which gives the ornament and liking. And, in most cases, the manner of doing is of more consequence than the thing done; and upon that depends the satisfaction, or disgust wherewith it is received. This, therefore, which lies not in the putting off the hat, nor making of compliments, but in a due and free composure of language, looks, motion, posture, place, &c., suited to persons and occasions, and can be learned only by habit and use, though it be above the capacity of children, and little ones should not be perplexed about it; yet it ought to be begun, and in a good measure learned, by a young gentleman whilst he is under a tutor, before he comes into the world upon his own legs; for then usually it is too late to hope to reform several habitual indecencies, which lie in little things. For the carriage is not as it should be, till it is become natural in every part; falling, as skillful musicians' fingers do, into harmonious order, without care and without thought. If in conversation a man's mind be taken up with a solicitous watchfulness about any part of his behavior, instead of being mended by it, it will be constrained, uneasy, and ungraceful.

Besides, this part is most necessary to be formed by the hands and care of a governor: because, though the errors committed in breeding are the first that are taken notice of by others, yet they are the last that any one is told of. Not but that the malice of the world is forward enough to tattle of them; but it is always out of his hearing who should make profit of their judgment, and reform himself by their censure. And, indeed, this is so nice a point to be meddled with, that even those who are friends, and wish it were mended, scarce ever dare mention it, and tell those they love that they are guilty in such or such cases of ill breeding. Errors in other things may often with civility be shown another; and it is no breach of good manners, or friendship, to set him right in other mistakes: but good breeding itself allows not a man to touch upon this; or to insinuate to another, that he is guilty of want of breeding. Such information can come only from those who have authority over them: and from them too it comes very hardly and harshly to a grown man; and, however softened, goes but ill down with any one who has lived ever so little in the world. Wherefore, it is necessary that this part should be the governor's principal care; that an habitual gracefulness, and politeness in all his carriage, may be settled in his charge, as much as may be, before he goes out of his hands: and that he may not need advice in this point when he has neither time nor disposition to receive it, nor has any body left to give it him. The tutor, therefore, ought in the first place to be well-bred: and a young gentleman who gets

this one qualification from his governor, sets out with great advantage; and will find, that this one accomplishment will more open his way to him, get him more friends, and carry him farther in the world, than all the hard words, or real knowledge, he has got from the liberal arts, or his tutor's learned encyclopedia; not that those should be neglected, but by no means preferred, or suffered to thrust out the other.

88. Besides being well-bred, the tutor should know the world well; the ways, the humors, the follies, the cheats, the faults of the age he is fallen into, and particularly of the country he lives in. These he should be able to show to his pupil, as he finds him capable; teach him skill in men, and their manners; pull off the mask which their several callings and pretenses cover them with; and make his pupil discern what lies at the bottom under such appearances; that he may not, as unexperienced young men are apt to do, if they are unwarned, take one thing for another, judge by the outside, and give himself up to show, and the insinuation of a fair carriage, or an obliging application. A governor should teach his scholar to guess at, and beware of the designs of men he hath to do with, neither with too much suspicion, nor too much confidence; but, as the young man is by nature most inclined to either side, rectify him, and bend him the other way. He should accustom him to make as much as is possible a true judgment of men by those marks which serve best to show what they are, and give a prospect into their inside; which often shows itself in little things; especially when they are not in parade, and upon their guard. He should acquaint him with the true state of the world, and dispose him to think no man better or worse, wiser or foolisher, than he really is. Thus, by safe and insensible degrees, he will pass from a boy to a man; which is the most hazardous step in all the whole course of life. This, therefore, should be carefully watched, and a young man with great diligence handed over it; and not, as now usually is done, be taken from a governor's conduct, and all at once thrown into the world under his own, not without manifest danger of immediate spoiling; there being nothing more frequent, than instances of the great looseness, extravagancy, and debauchery, which young men have run into, as soon as they have been let loose from a severe and strict education: which I think may be chiefly imputed to their wrong way of breeding, especially in this part; for having been bred up in a great ignorance of what the world truly is, and finding it quite another thing, when they come into it, than what they were taught it should be, and so imagined it was, are easily persuaded, by other kind of tutors, which they are sure to meet with, that the discipline they were kept under, and the lectures that were read to them, were but the formalities of education, and the restraints of childhood; that the freedom belonging to men, is to take their swing in a full enjoyment of what was before forbidden them. They show the young novice the world full of fashionable and glittering examples of this everywhere, and he is presently dazzled with them. My young master failing not to be willing to show himself a man, as much as any of the sparks of his years, lets himself loose to all the irregularities he finds in the most debauched; and thus courts credit and manliness, in the casting off the modesty and sobriety, he has till then been kept in; and thinks it brave, at his first setting out, to signalize himself in running counter to all the rules of virtue, which have been preached to him by his tutor.

The showing him the world as really it is, before he comes wholly into it, is one of the best means, I think, to prevent this mischief. He should, by degrees,

be informed of the vices in fashion, and warned of the applications and designs of those, who will make it their business to corrupt him. He should be told the arts they use, and the trains they lay; and now and then have set before him the tragical or ridiculous examples of those, who are ruining, or ruined this way. The age is not like to want instances of this kind, which should be made land-marks to him; that by the disgraces, diseases, beggary, and shame of hopeful young men thus brought to ruin, he may be precautioned, and be made to see, how those join in the contempt and neglect of them that are undone, who by pretenses of friendship and respect led them into it, and help to prey upon them whilst they were undoing; that he may see, before he buys it by a too dear experience that, those who persuade him not to follow the sober advices he has received from his governors, and the counsel of his own reason, which they call being governed by others, do it only, that they may have the government of him themselves; and make him believe he goes like a man of himself, by his own conduct, and for his own pleasure; when, in truth, he is wholly as a child led by them into those vices, which best serve their purposes. This is a knowledge which, upon all occasions, a tutor should endeavor to instill, and by all methods try to make him comprehend, and thoroughly relish.

I know it is often said, that to discover to a young man the vices of the age, is to teach them him. That I confess is a good deal so, according as it is done; and, therefore, requires a discreet man of parts, who knows the world, and can judge of the temper, inclination and weak side of his pupil. This farther is to be remembered, that it is not possible now (as perhaps formerly it was) to keep a young gentleman from vice, by a total ignorance of it; unless you will all his life mew him up in a closet, and never let him go into company. The longer he is kept thus hood-winked, the less he will see, when he comes abroad into open day-light, and be the more exposed to be a prey to himself, and others. And an old boy at his first appearance, with all the gravity of his ivy-bush about him, is sure to draw on him the eyes and chirping of the whole town volery; amongst which, there will not be wanting some birds of prey, that will presently be on the wing for him.

The only fence against the world is, a thorough knowledge of it; into which a young gentleman should be entered by degrees, as he can bear it; and the earlier the better, so he be in safe and skillful hands to guide him. The scene should be gently opened, and his entrance made step by step, and the dangers pointed out that attend him, from the several degrees, tempters, designs, and clubs of men. He should be prepared to be shocked by some, and caressed by others; warned who are like to oppose, who to mislead, who to undermine him, and who to serve him. He should be instructed how to know, and distinguish men; where he should let them see, and when dissemble the knowledge of them, and their aims and workings. And if he be too forward to venture upon his own strength and skill, the perplexity and trouble of a misadventure now and then, that reaches not his innocence, his health, or reputation, may not be an ill way to teach him more caution.

This, I confess, containing one great part of wisdom, is not the product of some superficial thoughts, or much reading; but the effect of experience and observation in a man, who has lived in the world with his eyes open, and conversed with men of all sorts. And, therefore, I think it of most value to be instilled into a young man, upon all occasions, which offer themselves, that when he comes to launch into the deep himself, he may not be like one at sea

without a line, compass, or sea-chart: but may have some notice beforehand of the rocks and shoals, the currents and quicksands, and know a little how to steer, that he sink not, before he get experience. He that thinks not this of more moment to his son, and for which he more needs a governor, than the languages and learned sciences, forgets of how much more use it is to judge right of men and manage his affairs wisely with them, than to speak Greek and Latin, or argue in mood and figure; or to have his head filled with the abstruse speculations of natural philosophy and metaphysics; nay, than to be well versed in Greek and Roman writers, though that be much better for a gentleman than to be a good peripatetic or Cartesian: because those ancient authors observed and painted mankind well, and give the best light into that kind of knowledge. He that goes into the eastern parts of Asia, will find able and acceptable men, without any of these: but without virtue, knowledge of the world, and civility, an accomplished and valuable man can be found nowhere.

A great part of the learning now in fashion in the schools of Europe, and that goes ordinarily into the round of education, a gentleman may in a good measure be unfurnished with, without any great disparagement to himself, or prejudice to his affairs. But prudence and good breeding are, in all the stations and occurrences of life, necessary; and most young men suffer in the want of them, and come rawer, and more awkward, into the world than they should, for this very reason, because these qualities, which are, of all other, the most necessary to be taught, and stand most in need of the assistance and help of a teacher, are generally neglected, and thought but a slight, or no part of a tutor's business. Latin and learning make all the noise: and the main stress is laid upon his proficiency in things, a great part whereof belongs not to a gentleman's calling; which is to have the knowledge of a man of business, a carriage suitable to his rank, and to be eminent and useful in his country, according to his station. Whenever either spare hours from that, or an inclination to perfect himself in some parts of knowledge, which his tutor did but just enter him in, set him upon any study; the first rudiments of it, which he learned before, will open the way enough for his own industry to carry him as far as his fancy will prompt, or his parts enable him to go: or, if he thinks it may save his time and pains, to be helped over some difficulties by the hands of a master, he may then take a man that is perfectly well skilled in it, or choose such an one as he thinks fittest for his purpose. But to initiate his pupil in any part of learning, as far as is necessary for a young man in the ordinary course of his studies, an ordinary skill in the governor is enough. Nor is it requisite that he should be a thorough scholar, or possess in perfection all those sciences, which it is convenient a young gentleman should have a taste of, in some general view, or short system. A gentleman that would penetrate deeper, must do it by his own genius and industry afterwards: for nobody ever went far in knowledge, or became eminent in any of the sciences by the discipline and constraint of a master.

The great work of a governor is to fashion the carriage, and form the mind; to settle in his pupil good habits, and the principles of virtue and wisdom; to give him by little and little, a view of mankind; and work him into a love and imitation of what is excellent and praiseworthy; and in the prosecution of it, to give him vigor, activity and industry. The studies which he sets him upon, are but as it were the exercises of his Faculties, and employment of his time, to keep him from sauntering and idleness, to teach him application, and accus-

tom him to take pains, and to give him some little taste to what his own industry must perfect. For who expects, that under a tutor a young gentleman should be an accomplished critic, orator or logician; go to the bottom of metaphysics, natural philosophy or mathematics; or be a master in history or chronology? though something of each of these is to be taught him: but it is only to open the door that he may look in, and, as it were, begin an acquaintance, but not to dwell there: and a governor would be much blamed, that should keep his pupil too long, and lead him too far in most of them. But of good breeding, knowledge of the world, virtue, industry, and a love of reputation, he can not have too much: and if he have these, he will not long want what he needs or desires of the other.

And, since it can not be hoped he should have time and strength to learn all things, most pains should be taken about that which is most necessary; and that principally looked after which will be of most and frequentest use to him in the world.

Seneca complains of the contrary practice in his time; and yet the Burgersdiciuses and the Scheiblers did not swarm in those days, as they do now in these. What would he have thought, if he had lived now, when the tutors think it their great business to fill the studies and heads of their pupils with such authors as these? He would have had much more reason to say, as he does, "Non vitæ, sed scholæ discimus," We learn not to live, but to dispute; and our education fits us rather for the university than the world. But it is no wonder if those who make the fashion suit it to what they have, and not to what their pupils want. The fashion being once established, who can think it strange, that in this, as well as in all other things, it should prevail; and that the greatest part of those, who find their account in an easy submission to it, should be ready to cry out heresy, when any one departs from it? It is, nevertheless, matter of astonishment, that men of quality, and parts, should suffer themselves to be so far misled by custom and implicit faith. Reason, if consulted with, would advise that their children's time should be spent in acquiring what might be useful to them when they come to be men; rather than to have their heads stuffed with a deal of trash, a great part whereof they usually never do, (it is certain they never need to,) think on again as long as they live; and so much of it as does stick by them, they are only the worse for. This is so well known, that I appeal to parents themselves, who have been at cost to have their young heirs taught it, whether it be not ridiculous for their sons to have any tincture of that sort of learning, when they come abroad into the world; whether any appearance of it would not lessen and disgrace them in company. And that certainly must be an admirable acquisition, and deserves well to make a part in education, which men are ashamed of, where they are most concerned to show their parts and breeding.

There is yet another reason, why politeness of manners, and knowledge of the world, should principally be looked after in a tutor: and that is, because a man of parts and years may enter a lad far enough in any of those sciences, which he has no deep insight into himself. Books in these will be able to furnish him, and give him light and precedency enough, to go before a young follower: but he will never be able to set another right in the knowledge of the world, and, above all, in breeding, who is a novice in them himself.

This is a knowledge he must have about him, worn into him by use and conversation, and a long forming himself by what he has observed to be practiced

and allowed in the best company. This, if he has it not of his own, is nowhere to be borrowed, for the use of his pupil: or if he could find pertinent treatises of it in books, that would reach all the particulars of an English gentleman's behavior; his own ill-fashioned example, if he be not well-bred himself, would spoil all his lectures; it being impossible, that any one should come forth well-fashioned out of unpolished, ill-bred company.

I say this, not that I think such a tutor is every day to be met with, or to be had at the ordinary rates: but that those, who are able, may not be sparing of inquiry or cost in what is of so great moment; and that other parents, whose estates will not reach to greater salaries, may yet remember what they should principally have an eye to, in the choice of one to whom they would commit the education of their children; and what part they should chiefly look after themselves, whilst they are under their care, and as often as they come within their observation; and not think, that all lies in Latin and French, or some dry systems of logic and philosophy.

FAMILIARITY.

89. But to return to our method again. Though I have mentioned the severity of the father's brow, and the awe settled thereby in the mind of children when young, as one main instrument whereby their education is to be managed; yet I am far from being of an opinion, that it should be continued all along to them whilst they are under the discipline and government of pupilage, I think it should be relaxed, as fast as their age, discretion, and good behavior could allow it even to that degree, that a father will do well as his son grows up, and is capable of it, to talk familiarly with him; nay, ask his advice, and consult with him about those things wherein he has any knowledge or understanding. By this the father will gain two things, both of great moment. The one is, that it will put serious considerations into his son's thoughts, better than any rules or advices he can give him. The sooner you treat him as a man, the sooner he will begin to be one, and if you admit him into serious discourses sometimes with you, you will insensibly raise his mind above the usual amusements of youth, and those trifling occupations which it is commonly wasted in. For it is easy to observe, that many young men continue longer in the thought and conversation of school-boys, than otherwise they would, because their parents keep them at that distance, and in that low rank, by all their carriage to them.

90. Another thing of greater consequence, which you will obtain by such a way of treating him, will be his friendship. Many fathers, though they proportion to their sons liberal allowances, according to their age and condition, yet they keep the knowledge of their estates and concerns from them with as much reservedness as if they were guarding a secret of state from a spy or an enemy. This, if it looks not like jealousy, yet it wants those marks of kindness and intimacy, which a father should show to his son, and, no doubt, often hinders or abates that cheerfulness and satisfaction wherewith a son should address himself to, and rely upon his father. And I can not but often wonder to see fathers, who love their sons very well, yet so order the matter by a constant stiffness, and a mien of authority and distance to them all their lives, as if they were never to enjoy or have any comfort from those they love best in the world till they have lost them by being removed into another. Nothing cements and

establishes friendship and good-will so much as confident communication of concernments and affairs. Other kindnesses, without this, leave still some doubts; but when your son sees you open your mind to him, when he finds that you interest him in your affairs as things you are willing should, in their turn, come into his hands, he will be concerned for them as for his own, wait his season with patience, and love you in the mean time, who keep him not at the distance of a stranger. This will also make him see, that the enjoyment you have is not without care, which the more he is sensible of, the less will he envy you the possession, and the more think himself happy under the management of so favorable a friend, and so careful a father. There is scarce any young man of so little thought, or so void of sense, that would not be glad of a sure friend, that he might have recourse to, and freely consult on occasion. The reservedness and distance that fathers keep, often deprive their sons of that refuge which would be of more advantage to them than a hundred rebukes and chidings. Would your son engage in some frolic, or take a vagary, were it not much better he should do it with than without your knowledge? For since allowances for such things must be made to young men, the more you know of his intrigues and designs, the better will you be able to prevent great mischiefs; and, by letting him see what is like to follow, take the right way of prevailing with him to avoid less inconveniences. Would you have him open his heart to you, and ask your advice? You must begin to do so with him first, and by your carriage beget that confidence.

91. But whatever he consults you about, unless it lead to some fatal and irremediable mischief, be sure you advise only as a friend of more experience; but with your advice mingle nothing of command or authority, nor more than you would to your equal, or a stranger. That would be to drive him forever from any farther demanding, or receiving advantage from your counsel. You must consider that he is a young man, and has pleasures and fancies which you are passed. You must not expect his inclinations should be just as yours, nor that at twenty he should have the same thoughts you have at fifty. All that you can wish is, that since youth must have some liberty, some outleaps, they might be with the ingenuity of a son, and under the eye of a father, and then no very great harm can come of it. The way to obtain this, as I said before, is (according as you find him capable,) to talk with him about your affairs, propose matters to him familiarly, and ask his advice; and when he ever lights on the right follow it as his, and if it succeed well, let him have the commendation. This will not at all lessen your authority, but increase his love and esteem of you. Whilst you keep your estate, the staff will still be in your own hands, and your authority the surer, the more it is strengthened with confidence and kindness. For you have not that power you ought to have over him, till he comes to be more afraid of offending so good a friend than of losing some part of his future expectation.

92. Familiarity of discourse, if it can become a father to his son, may much more be condescended to by a tutor to his pupil. All their time together should not be spent in reading of lectures, and magisterially dictating to him what he is to observe and follow, hearing him in his turn, and using him to reason about what is proposed, will make the rules go down the easier, and sink the deeper, and will give him a liking to study and instruction, and he will then begin to value knowledge, when he sees that it enables him to discourse, and he finds

the pleasure and credit of bearing a part in the conversation. and of having his reasons sometimes approved and hearkened to. Particularly in morality, prudence, and breeding, cases should be put to him, and his judgment asked; this opens the understanding better than maxims, how well soever explained, and settles the rules better in the memory for practice. This way lets things into the mind, which stick there and retain their evidence with them; whereas words at best are faint representations, being not so much as the true shadows of things, and are much sooner forgotten. He will better comprehend the foundations and measures of decency and justice, and have livelier and more lasting impressions of what he ought to do, by giving his opinion on cases proposed, and reasoning with his tutor on fit instances, than by giving a silent, negligent, sleepy audience to his tutor's lectures, and much more than by captious logical disputes, or set declamations of his own, upon any question. The one sets the thoughts upon wit, and false colors, and not upon truth; the other teaches fallacy, wrangling, and opiniatry, and they are both of them things that spoil the judgment, and put a man out of the way of right and fair reasoning, and therefore carefully to be avoided by one who would improve himself, and be acceptable to others.

REVERENCE.

93. When, by making your son sensible that he depends on you, and is in your power, you have established your authority, and by being inflexibly severe in your carriage to him, when obstinately persisting in any ill-natured trick which you have forbidden, especially lying, you have imprinted on his mind that awe which is necessary; and, on the other side, when (by permitting him the full liberty due to his age, and laying no restraint in your presence to those childish actions, and gayety of carriage which, whilst he is very young, are as necessary to him as meat or sleep,) you have reconciled him to your company, and made him sensible of your care and love of him by indulgence and tenderness, especially caressing him on all occasions wherein he does any thing well, and being kind to him, after a thousand fashions, suitable to his age, which nature teaches parents better than I can; when, I say, by these ways of tenderness and affection, which parents never want for their children, you have also planted in him a particular affection for you; he is then in the state you could desire, and you have formed in his mind that true reverence which is always afterwards carefully to be continued and maintained in both parts of it, love and fear, as the great principles whereby you will always have hold upon him to turn his mind to the ways of virtue and honor.

TEMPER.

94. When this foundation is once well laid, and you find this reverence begin to work in him, the next thing to be done is carefully to consider his temper and the particular constitution of his mind. Stubbornness, lying, and ill-natured actions, are not (as has been said,) to be permitted in him from the beginning, whatever his temper be; those seeds of vices are not to be suffered to take any root, but must be carefully weeded out as soon as ever they begin to show themselves in him; and your authority is to take place and influence his mind from the very dawning of any knowledge in him, that it may operate as a natural principle, whereof he never perceived the beginning, never knew that it was, or could be otherwise. By this, if the reverence he owes you be estab-

lished early, it will always be sacred to him, and it will be as hard for him to resist it, as the principles of his nature.

95. Having thus very early set up your authority, and, by the gentler applications of it, shamed him out of what leads towards an immoral; habit as soon as you have observed it in him, (for I would by no means have chiding used, much less blows, till obstinacy and incorrigibleness make it absolutely necessary,) it will be fit to consider which way the natural make of his mind inclines him. Some men, by the unalterable frame of their constitutions, are stout, others timorous; some confident, others modest, tractable or obstinate, curious or careless, quick or slow. There are not more differences in men's faces, and the outward lineaments of their bodies, than there are in the makes and tempers of their minds, only there is this difference, that the distinguishing characters of the face, and the lineaments of the body, grow more plain and visible with time and age, but the peculiar physiognomy of the mind is most discernible in children before art and cunning have taught them to hide their deformities, and conceal their ill inclinations under a dissembled outside.

96. Begin, therefore, betimes nicely to observe your son's temper, and that when he is under least restraint, in his play, and as he thinks, out of your sight. See what are his predominant passions, and prevailing inclinations; whether he be fierce or mild, bold or bashful, compassionate or cruel, open or reserved, &c. For as these are different in him, so are your methods to be different, and your authority must hence take measures to apply itself different ways to him. These native propensities, these prevalences of constitution, are not to be cured by rules, or a direct contest; especially those of them that are the humbler and meaner sort, which proceed from fear and lowness of spirit; though with art they may be much mended, and turned to good purpose. But this be sure of, after all is done, the bias will always hang on that side where nature first placed it; and, if you carefully observe the characters of his mind now in the first scenes of his life, you will ever after be able to judge which way his thoughts lean, and what he aims at even hereafter, when, as he grows up, the plot thickens, and he puts on several shapes to act it.

DOMINION.

97. I told you before, that children love liberty, and therefore they should be brought to do the things that are fit for them, without feeling any restraint laid upon them. I now tell you they love something more, and that is dominion; and this is the first original of most vicious habits that are ordinary and natural. This love of power and dominion shows itself very early, and that in these two things.

98. 1. We see children (as soon almost as they are born, I am sure long before they can speak,) cry, grow peevish, sullen, and out of humor, for nothing but to have their wills. They would have their desires submitted to by others; they contend for a ready compliance from all about them, especially from those that stand near or beneath them in age or degree, as soon as they come to consider others with those distinctions.

99. 2. Another thing wherein they show their love of dominion, is their desire to have things to be theirs; they would have property and possession, pleasing themselves with the power which that seems to give, and the right they thereby have to dispose of them as they please. He that has not observed these two humors working very betimes in children, has taken little

notice of their actions, and he who thinks that these two roots of almost all the injustice and contention that so disturb human life, are not early to be weeded out, and contrary habits introduced, neglects the proper season to lay the foundations of a good and worthy man. To do this, I imagine, these following things may somewhat conduce.

CRAVING.

100. 1. That a child should never be suffered to have what he craves, much less what he cries for, I had said, or so much as speaks for. But that being apt to be misunderstood and interpreted as if I meant a child should never speak to his parents for any thing, which will perhaps be thought to lay too great a curb on the minds of children, to the prejudice of that love and affection which should be between them and their parents, I shall explain myself a little more particularly. It is fit that they should have liberty to declare their wants to their parents, and that with all tenderness they should be hearkened to, and supplied at least whilst they are very little. But it is one thing to say, I am hungry; another to say, I would have roast-meat. Having declared their wants, their natural wants, the pain they feel from hunger, thirst, cold, or any other necessity of nature, it is the duty of their parents, and those about them, to relieve them; but children must leave it to the choice and ordering of their parents what they think properest for them, and how much, and must not be permitted to choose for themselves, and say, I would have wine, or white bread; the very naming of it should make them lose it.

101. That which parents should take care of here, is to distinguish between the wants of fancy and those of nature, which Horace has well taught them to do in this verse,

"Queis humana sibi doleat natura negatis."

Those are truly natural wants, which reason alone, without some other help, is not able to fence against nor keep from disturbing us. The pains of sickness and hurts, hunger, thirst, and cold, want of sleep and rest, or relaxation of the part wearied with labor, are what all men feel, and the best disposed mind can not but be sensible of their uneasiness, and therefore ought, by fit applications, to seek their removal, though not with impatience, or over-great haste, upon the first approaches of them, where delay does not threaten some irreparable harm. The pains that come from the necessities of nature, are monitors to us to beware of greater mischiefs, which they are the forerunners of, and therefore they must not be wholly neglected, nor strained too far. But yet, the more children can be inured to hardships of this kind, by a wise care to make them stronger in body and mind, the better it will be for them. I need not here give any caution to keep within the bounds of doing them good, and to take care that what children are made to suffer should neither break their spirits, nor injure their health, parents being but too apt of themselves to incline, more than they should, to the softer side.

But whatever compliance the necessities of nature may require, the wants of fancy children should never be gratified in, nor suffered to mention. The very speaking for any such thing should make them lose it. Clothes, when they need, they must have; but if they speak for this stuff, or that color, they should be sure to go without it. Not that I would have parents purposely cross the desires of their children in matters of indifferency; on the contrary, where their carriage deserves it, and one is sure it will not corrupt or effeminate their

minds, and make them fond of trifles, I think all things should be contrived, as much as could be, to their satisfaction, that they might find the ease and pleasure of doing well. The best for children is, that they should not place any pleasure in such things at all, nor regulate their delight by their fancies; but be indifferent to all that nature has made so. This is what their parents and teachers should chiefly aim at; but till this be obtained, all that I oppose here, is the liberty of asking; which, in these things of conceit, ought to be restrained by a constant forfeiture annexed to it.

This may perhaps be thought a little too severe, by the natural indulgence of tender parents, but yet it is no more than necessary. For since the method I propose is to banish the rod, this restraint of their tongues will be of great use to settle that awe we have elsewhere spoken of, and to keep up in them the respect and reverence due to their parents. Next, it will teach them to keep in, and so master their inclinations. By this means they will be brought to learn the art of stifling their desires, as soon as they rise up in them, when they are easiest to be subdued. For giving vent, gives life and strength to our appetites, and he that has the confidence to turn his wishes into demands, will be but a little way from thinking he ought to obtain them. This I am sure of, every one can more easily bear a denial from himself, than from anybody else. They should therefore be accustomed betimes to consult and make use of their reason, before they give allowance to their inclinations. It is a great step towards the mastery of our desires, to give this stop to them, and shut them up in silence. This habit, got by children, of staying the forwardness of their fancies, and deliberating whether it be fit or no before they speak, will be of no small advantage to them in matters of greater consequence in the future course of their lives. For that which I can not too often inculcate, is that whatever the matter be, about which it is conversant, whether great or small, the main (I had almost said only) thing to be considered, in every action of a child is, what influence it will have upon his mind; what habit it tends to, and is like to settle in him; how it will become him when he is bigger; and, if it be encouraged, whither it will lead him when he is grown up.

My meaning, therefore, is not, that children should purposely be made uneasy; this would relish too much of inhumanity and ill-nature, and be apt to infect them with it. They should be brought to deny their appetites, and their minds as well as bodies, be made vigorous, easy, and strong, by the custom of having their inclinations in subjection, and their bodies exercised with hardships; but all this without giving them any mark or apprehension of ill-will towards them. The constant loss of what they craved or carved to themselves should teach them modesty, submission, and a power to forbear; but the rewarding their modesty and silence, by giving them what they liked, should also assure them of the love of those who rigorously exacted this obedience. The contenting themselves now, in the want of what they wished for, is a virtue that another time should be rewarded with what is suited and acceptable to them; which should be bestowed on them as if it were a natural consequence of their good behavior, and not a bargain about it. But you will lose your labor, and, what is more, their love and reverence too, if they can receive from others what you deny them. This is to be kept very staunch, and carefully to be watched. And here the servants come again in my way.

CURIOSITY.

102. If this be begun by times, and they accustom themselves early to silence their desires, this useful habit will settle them; and, as they come to grow up in age and discretion, they may be allowed greater liberty; when reason comes to speak in them, and not passion. For whenever reason would speak, it should be hearkened to. But, as they should never be heard, when they speak for any particular thing they would have, unless it be first proposed to them; so they should always be heard, and fairly and kindly answered, when they ask after any thing they would know, and desire to be informed about. Curiosity should be as carefully cherished in children, as other appetites suppressed.

RECREATION.

However strict a hand is to be kept upon all desires of fancy, yet there is one case wherein fancy must be permitted to speak, and be hearkened to also. Recreation is as necessary as labor or food; but because there can be no recreation without delight, which depends not always on reason, but oftener on fancy, it must be permitted children not only to divert themselves, but to do it after their own fashion, provided it be innocently, and without prejudice to their health; and therefore in this case they should not be denied, if they proposed any particular kind of recreation; though I think, in a well-ordered education, they will seldom be brought to the necessity of asking any such liberty. Care should be taken that what is of advantage to them, they should always do with delight; and, before they are wearied with one, they should be timely diverted to some other useful employment. But if they are not yet brought to that degree of perfection, that one way of improvement can be made a recreation to them, they must be let loose to the childish play they fancy, which they should be weaned from, by being made surfeited of it; but from things of use, that they are employed in, they should always be sent away with an appetite; at least be dismissed before they are tired, and grow quite sick of it; that so they may return to it again, as to a pleasure that diverts them. For you must never think them set right, till they can find delight in the practice of laudable things; and the useful exercises of the body and mind, taking their turns, make their lives and improvement pleasant in a continued train of recreations, wherein the wearied part is constantly relieved and refreshed. Whether this can be done in every temper, or whether tutors and parents will be at the pains, and have the discretion and patience to bring them to this, I know not; but that it may be done in most children, if a right course be taken to raise in them the desire of credit, esteem, and reputation, I do not at all doubt. And when they have so much true life put into them, they may freely be talked with about what most delights them, and be directed or let loose to it, so that they may perceive that they are beloved and cherished, and that those under whose tuition they are, are not enemies to their satisfaction. Such a management will make them in love with the hand that directs them, and the virtue they are directed to.

This farther advantage may be made by a free liberty permitted them in their recreations, that it will discover their natural tempers, show their inclinations and aptitudes, and thereby direct wise parents in the choice, both of the course of life and employment they shall design them for, and of fit remedies in the

mean time, to be applied to whatever bent of nature they may observe most likely to mislead any of their children.

103. 2. Children, who live together, often strive for mastery, whose wills shall carry it over the rest; whoever begins the contest, should be sure to be crossed in it. But not only that, but they should be taught to have all the deference, complaisance, and civility one for the other imaginable. This, when they see it procures them respect, love, and esteem, and that they lose no superiority by it, they will take more pleasure in, than in insolent domineering, for so plainly is the other.

COMPLAINTS.

The accusations of children one against another, which usually are but the clamors of anger and revenge, desiring aid, should not be favorably received nor hearkened to. It weakens and effeminates their minds to suffer them to complain; and if they endure sometimes crossing or pain from others, without being permitted to think it strange or intolerable, it will do them no harm to learn sufferance, and harden them early. But, though you give no countenance to the complaints of the querulous, yet take care to curb the insolence and ill-nature of the injurious. When you observe it yourself, reprove it before the injured party; but if the complaint be of something really worth your notice and prevention another time, then reprove the offender by himself alone, out of sight of him that complained, and make him go and ask pardon, and make reparation: which coming thus, as it were, from himself, will be the more cheerfully performed, and more kindly received, the love strengthened between them, and a custom of civility grow familiar amongst your children.

LIBERALITY.

104. 3. As to having and possessing of things, teach them to part with what they have, easily and freely to their friends, and let them find by experience, that the most liberal has always most plenty, with esteem and commendation to boot, and they will quickly learn to practice it. This, I imagine, will make brothers and sisters kinder and civiller to one another, and consequently to others, than twenty rules about good manners, with which children are ordinarily perplexed and cumbered. Covetousness, and the desire of having in our possession and under our dominion, more than we have need of, being the root of all evil, should be early and carefully weeded out, and the contrary quality, or a readiness to impart to others, implanted. This should be encouraged by great commendation and credit, and constantly taking care that he loses nothing by his liberality. Let all the instances he gives of such freeness, be always repaid, and with interest, and let him sensibly perceive, that the kindness he shows to others is no ill husbandry for himself, but that it brings a return of kindness, both from those that receive it, and those who look on. Make this a contest among children, who shall outdo one another this way. And by this means, by a constant practice, children having made it easy to themselves to part with what they have, good-nature may be settled in them into an habit, and they may take pleasure, and pique themselves in being kind, liberal, and civil to others.

JUSTICE.

If liberality ought to be encouraged, certainly great care is to be taken that

children transgress not the rules of justice; and whenever they do, they should be set right, and, if there be occasion for it, severely rebuked.

Our first actions being guided more by self-love than reason or reflection, it is no wonder that in children they should be very apt to deviate from the just measures of right and wrong, which are in the mind the result of improved reason and serious meditation. This the more they are apt to mistake, the more careful guard ought to be kept over them, and every the least slip in this great social virtue taken notice of and rectified; and that in things of the least weight and moment, both to instruct their ignorance, and prevent ill habits, which, from small beginnings, in pins and cherry-stones, will, if let alone, grow up to higher frauds, and be in danger to end at last in down right hardened dishonesty. The first tendency to any injustice that appears, must be suppressed with a show of wonder and abhorrency in the parents and governors. But because children can not well comprehend what injustice is, till they understand property, and how particular persons come by it, the safest way to secure honesty is to lay the foundations of it early in liberality, and an easiness to part with to others whatever they have, or like, themselves. This may be taught them early, before they have language and understanding enough to form distinct notions of property, and to know what is theirs by a peculiar right exclusive of others. And since children seldom have any thing but by gift, and that for the most part from their parents, they may be at first taught not to take or keep any thing but what is given them by those whom they take to have a power over it; and, as their capacities enlarge, other rules and cases of justice, and rights concerning "meum" and "tuum," may be proposed and inculcated. If any act of injustice in them appears to proceed, not from mistake, but perverseness in their wills, when a gentle rebuke and shame will not reform this irregular and covetous inclination, rougher remedies must be applied; and it is but for the father or tutor to take and keep from them something that they value and think their own; or, order somebody else to do it, and by such instances make them sensible, what little advantage they are like to make, by possessing themselves unjustly of what is another's, whilst there are in the world stronger and more men than they. But if an ingenuous detestation of this shameful vice be but carefully and early instilled into them, as I think it may, that is the true and genuine method to obviate this crime, and will be a better guard against dishonesty, than any considerations drawn from interest; habits working more constantly, and with greater facility, than reason; which, when we have most need of it, is seldom fairly consulted, and more rarely obeyed.

CRYING.

105. Crying is a fault that should not be tolerated in children; not only for the unpleasant and unbecoming noise it fills the house with, but for more considerable reasons, in reference to the children themselves, which is to be our aim in education.

Their crying is of two sorts; either stubborn and domineering, or querulous and whining.

1. Their crying is very often a striving for mastery, and an open declaration of their insolence or obstinacy: when they have not the power to obtain their desire, they will, by their clamor and sobbing, maintain their title and right to it. This is an avowed continuing of their claim, and a sort of remonstrance

against the oppression and injustice of those who deny them what they have a mind to.

106. 2. Sometimes their crying is the effect of pain or true sorrow, and a bemoaning themselves under it.

These two, if carefully observed, may, by the mien, look, and actions, and particularly by the tone of their crying, be easily distinguished; but neither of them must be suffered, much less encouraged.

1. The obstinate or stomachful crying should by no means be permitted; because it is but another way of flattering their desires, and encouraging those passions, which it is our main business to subdue; and if it be, as often it is, upon the receiving any correction, it quite defeats all the good effects of it; for any chastisement which leaves them in this declared opposition, only serves to make them worse. The restraints and punishments laid on children are all misapplied and lost, as far as they do not prevail over their wills, teach them to submit their passions, and make their minds supple and pliant to what their parents' reason advises them now, and so prepare them to obey what their own reason should advise hereafter. But if in any thing wherein they are crossed, they may be suffered to go away crying, they confirm themselves in their desires, and cherish the ill humor with a declaration of their right, and a resolution to satisfy their inclinations the first opportunity. This, therefore, is another argument against the frequent use of blows; for, whenever you come to that extremity, it is not enough to whip or beat them; you must do it till you find you have subdued their minds; till with submission and patience they yield to the correction, which you shall best discover by their crying, and their ceasing from it upon your bidding. Without this, the beating of children is but a passionate tyranny over them; and it is mere cruelty, and not correction, to put their bodies in pain, without doing their minds any good. As this gives us a reason why children should seldom be corrected, so it also prevents their being so. For if, whenever they are chastised, it were done thus without passion, soberly and yet effectually too, laying on the blows and smart, not furiously and all at once, but slowly, with reasoning between, and with observation how it wrought, stopping when it had made them pliant, penitent, and yielding; they would seldom need the like punishment again, being made careful to avoid the fault that deserved it. Besides, by this means, as the punishment would not be lost, for being too little, and not effectual; so it would be kept from being too much, if we gave off as soon as we perceived it reached the mind, and that was bettered. For, since the chiding or beating of children should be always the least that possibly may be, that which is laid on in the heat of anger, seldom observes that measure, but is commonly more than it should be, though it prove less than enough.

107. 2. Many children are apt to cry upon any little pain they suffer, and the least harm that befalls them, puts them into complaints and bawling. This few children avoid; for it being the first and natural way to declare their sufferings or wants, before they can speak, the compassion that is thought due to that tender age foolishly encourages, and continues it in them long after they can speak. It is the duty, I confess, of those about children, to compassionate them whenever they suffer any hurt, but not to show it in pitying them. Help and ease them the best you can, but by no means bemoan them. This softens their minds, and makes them yield to the little harms that happen to

them; whereby they sink deeper into that part which alone feels, and make larger wounds there, than otherwise they would. They should be hardened against all sufferings, especially of the body, and have no tenderness but what rises from an ingenuous shame and a quick sense of reputation. The many inconveniences this life is exposed to, require we should not be too sensible of every little hurt. What our minds yield not to, makes but a slight impression, and does us but very little harm; it is the suffering of our spirits that gives and continues the pain. This brawniness and insensibility of mind, is the best armor we can have against the common evils and accidents of life; and being a temper that is got by exercise and custom, more than any other way, the practice of it should be begun betimes, and happy is he that is taught it early. That effeminacy of spirit, which is to be prevented or cured, and which nothing, that I know, so much increases in children as crying; so nothing, on the other side, so much checks and restrains, as their being hindered from that sort of complaining. In the little harms they suffer, from knocks and falls, they should not be pitied for falling, but bid do so again; which, besides that it stops their crying, is a better way to cure their heedlessness, and prevent their tumbling another time, than either chiding or bemoaning them. But, let the hurts they receive be what they will, stop their crying, and that will give them more quiet and ease at present, and harden them for the future.

108. The former sort of crying requires severity to silence it; and where a look, or positive command, will not do it, blows must; for it proceeding from pride, obstinacy, and stomach, the will, where the fault lies, must be bent, and made to comply, by a rigor sufficient to master it; but this latter, being ordinarily from softness of mind, a quite contrary cause ought to be treated with a gentler hand. Persuasion, or diverting the thoughts another way, or laughing at their whining, may perhaps be at first the proper method. But for this, the circumstances of the thing, and the particular temper of the child, must be considered; no certain invariable rules can be given about it; but it must be left to the prudence of the parents or tutor. But this I think I may say in general, that there should be a constant discountenancing of this sort of crying also; and that the father, by his authority, should always stop it, mixing a greater degree of roughness in his looks or words, proportionably as the child is of a greater age, or a sturdier temper; but always, let it be enough to silence their whimpering, and put an end to the disorder.

FOOL-HARDINESS.

109. Cowardice and courage are so nearly related to the fore-mentioned tempers, that it may not be amiss here to take notice of them. Fear is a passion, that, if rightly governed, has its use. And though self-love seldom fails to keep it watchful and high enough in us, yet there may be an excess on the daring side; fool-hardiness and insensibility of danger being as little reasonable, as trembling and shrinking at the approach of every little evil. Fear was given us as a monitor to quicken our industry, and keep us upon our guard against the approaches of evil; and, therefore, to have no apprehension of mischief at hand, not to make a just estimate of the danger, but heedlessly to run into it, be the hazard what it will, without considering of what use or consequence it may be; is not the resolution of a rational creature, but brutish fury. Those who have children of this temper, have nothing to do but a little to awaken

their reason, which self-preservation will quickly dispose them to hearken to; unless (which is usually the case) some other passion hurries them on headlong, without sense, and without consideration. A dislike of evil is so natural to mankind, that nobody, I think, can be without fear of it; fear being nothing but an uneasiness under the apprehension of that coming upon us which we dislike. And therefore, whenever any one runs into danger, we may say it is under the conduct of ignorance, or the command of some more imperious passion, nobody being so much an enemy to himself as to come within the reach of evil out of free choice, and court danger for danger's sake. If it be therefore pride, vain-glory, or rage, that silences a child's fear, or makes him not hearken to its advice, those are by fit means to be abated, that a little consideration may allay his heat, and make him bethink himself whether this attempt be worth the venture. But this being a fault that children are not so often guilty of, I shall not be more particular in its cure. Weakness of spirit is the more common defect, and therefore will require the greater care.

Fortitude is the guard and support of the other virtues; and without courage a man will scarce keep steady to his duty, and fill up the character of a truly worthy man.

COURAGE.

Courage, that makes us bear up against dangers that we fear, and evils that we feel, is of great use in an estate, as ours is, in this life, exposed to assaults on all hands; and therefore it is very advisable to get children into this armor as early as we can. Natural temper, I confess, does here a great deal; but even where that is defective, and the heart is in itself weak and timorous, it may, by a right management, be brought to a better resolution. What is to be done to prevent breaking children's spirits by frightful apprehensions instilled into them when young, or bemoaning themselves under every little suffering, I have already taken notice. How to harden their tempers, and raise their courage, if we find them too much subject to fear, is farther to be considered.

True fortitude I take to be the quiet possession of a man's self, and an undisturbed doing his duty, whatever evil besets, or danger lies in his way. This there are so few men attain to, that we are not to expect it from children. But yet something may be done; and a wise conduct, by insensible degrees, may carry them farther than one expects.

The neglect of this great care of them, whilst they are young, is the reason, perhaps, why there are so few that have this virtue, in its full latitude, when they are men. I should not say this in a nation so naturally brave as ours is, did I think that true fortitude required nothing but courage in the field, and a contempt of life in the face of an enemy. This, I confess, is not the least part of it, nor can be denied the laurels and honors always justly due to the valor of those who venture their lives for their country. But yet this is not all; dangers attack us in other places besides the field of battle; and though death be the king of terrors, yet pain, disgrace, and poverty, have frightful looks, able to discompose most men, whom they seem ready to seize on; and there are those who contemn some of these, and yet are heartily frightened with the other. True fortitude is prepared for dangers of all kinds, and unmoved, whatsoever evil it be that threatens; I do not mean unmoved with any fear at all. Where danger shows itself, apprehension can not, without stupidity, be wanting. Where danger is, sense of danger should be; and so much fear as should keep

us awake, and excite our attention, industry, and vigor; but not disturb the calm use of our reason nor hinder the execution of what that dictates.

COWARDICE.

The first step to get this noble and manly steadiness, is, what I have above-mentioned, carefully to keep children from frights of all kinds, when they are young. Let not any fearful apprehensions be talked into them, nor terrible objects surprise them. This often so shatters and discomposes the spirits, that they never recover it again; but during their whole life, upon the first suggestion, or appearance of any terrifying idea, are scattered and confounded; the body is enervated, and the mind disturbed, and the man scarce himself, or capapable of any composed or rational action. Whether this be from an habitual motion of the animal spirits, introduced by the first strong impression; or from the alteration of the constitution, by some more unaccountable way; this is certain, that so it is. Instances of such, who in a weak, timorous mind have born, all their whole lives through, the effects of a fright when they were young, are everywhere to be seen; and therefore, as much as may be, to be prevented.

The next thing is, by gentle degrees, to accustom children to those things they are too much afraid of. But here great caution is to be used, that you do not make too much haste, nor attempt this cure too early, for fear lest you increase the mischief instead of remedying it. Little ones in arms may be easily kept out of the way of terrifying objects, and till they can talk and understand what is said to them, are scarce capable of that reasoning and discourse, which should be used to let them know there is no harm in those frightful objects which we would make them familiar with, and do, to that purpose, by gentle degrees, bring nearer and nearer to them. And, therefore, it is seldom there is need of any application to them of this kind, till after they can run about and talk. But yet, if it should happen, that infants should have taken offense at any thing which can not be easily kept out of their way; and that they show marks of terror, as often as it comes in sight; all the allays of fright, by diverting their thoughts, or mixing pleasant and agreeable appearances with it, must be used, till it be grown familiar and inoffensive to them.

I think we may observe, that when children are first born, all objects of sight that do not hurt the eyes, are indifferent to them; and they are no more afraid of a blackamoor, or a lion, than of their nurse, or a cat. What is it, then, that afterwards, in certain mixtures of shape and color, comes to affright them? Nothing but the apprehensions of harm that accompanies those things. Did a child suck every day a new nurse, I make account it would be no more affrighted with the change of faces at six months old, than at sixty. The reason then, why it will not come to a stranger, is, because, having been accustomed to receive its food and kind usage only from one or two that are about it, the child apprehends, by coming into the arms of a stranger, the being taken from what delights and feeds it, and every moment supplies its wants, which it often feels, and therefore fears when the nurse is away.

TIMOROUSNESS.

The only thing we naturally are afraid of, is pain, or loss of pleasure. And because these are not annexed to any shape, color, or size of visible objects, we are frightened with none of them, till either we have felt pain from them, or

have notions put into us that they will do us harm. The pleasant brightness and luster of flame and fire so delights children, that at first they always desire to be handling of it: but when constant experience has convinced them, by the exquisite pain it has put them to, how cruel and unmerciful it is, they are afraid to touch it, and carefully avoid it. This being the ground of fear, it is not hard to find whence it arises, and how it is to be cured in all mistaken objects of terror; and when the mind is confirmed against them, and has got a mastery over itself, and its usual fears in lighter occasions, it is in good preparation to meet more real dangers. Your child shrieks, and runs away at the sight of a frog; let another catch it, and lay it down at a good distance from him; at first accustom him to look upon it; when he can do that, then to come nearer to it, and see it leap without emotion; then to touch it lightly, when it is held fast in another's hand; and so on, till he can come to handle it as confidently as a butterfly, or a sparrow. By the same way any other vain terrors may be removed, if care be taken that you go not too fast, and push not the child on to a new degree of assurance, till he be thoroughly confirmed in the former. And thus the young soldier is to be trained on to the warfare of life; wherein care is to be taken, that more things be not represented as dangerous, than really are so; and then, that whatever you observe him to be more frightened at than he should, you be sure to toll him on to, by insensible degrees, till he at last, quitting his fears, masters the difficulty, and comes off with applause. Successes of this kind, often repeated, will make him find, that evils are not always so certain, or so great, as our fears represent them; and that the way to avoid them is not to run away, or be discomposed, dejected, and deterred by fear, where either our credit or duty requires us to go on.

HARDINESS.

But, since the great foundation of fear in children is pain, the way to harden and fortify children against fear and danger, is to accustom them to suffer pain. This, it is possible, will be thought by kind parents, a very unnatural thing towards their children; and by most, unreasonable, to endeavor to reconcile any one to the sense of pain, by bringing it upon him. It will be said, it may perhaps give the child an aversion for him that makes him suffer, but can never recommend to him suffering itself. This is a strange method. You will not have children whipped and punished for their faults, but you would have them tormented for doing well, or for tormenting's sake. I doubt not but such objections as these will be made, and I shall be thought inconsistent with myself, or fantastical, in proposing it. I confess it is a thing to be managed with great discretion; and therefore it falls not out amiss, that it will not be received or relished, but by those who consider well, and look into the reason of things. I would not have children much beaten for their faults, because I would not have them think bodily pain the greatest punishment; and I would have them when they do well, be sometimes put in pain, for the same reason, that they might be accustomed to bear it without looking on it as the greatest evil. How much education may reconcile young people to pain and sufferance, the examples of Sparta do sufficiently show; and they who have once brought themselves not to think bodily pain the greatest of evils, or that which they ought to stand most in fear of, have made no small advance towards virtue. But I am not so foolish to propose the Lacedæmonian discipline in our age or constitution; but

yet I do say, that inuring children gently to suffer some degrees of pain without shrinking, is a way to gain firmness to their minds, and lay a foundation for courage and resolution in the future part of their lives.

Not to bemoan them, or permit them to bemoan themselves, on every little pain they suffer, is the first step to be made. But of this I have spoken elsewhere.

The next thing is, sometimes designedly to put them in pain; but care must be taken that this be done when the child is in good humor, and satisfied of the good-will and kindness of him that hurts him, at the time that he does it. There must no marks of anger or displeasure on the one side, nor compassion or repenting on the other, go along with it; and it must be sure to be no more than the child can bear, without repining or taking it amiss, or for a punishment. Managed by these degrees, and with such circumstances, I have seen a child run away laughing, with good smart blows of a wand on his back, who would have cried for an unkind word, and have been very sensible of the chastisement of a cold look from the same person. Satisfy a child, by a constant course of your care and kindness, that you perfectly love him; and he may by degrees be accustomed to bear very painful and rough usage from you, without flinching or complaining; and this we see children do every day in play one with another. The softer you find your child is, the more you are to seek occasions at fit times thus to harden him. The great art in this is to begin with what is but very little painful, and to proceed by insensible degrees, when you are playing and in good humor with him, and speaking well of him; and when you have once got him to think himself made amends for his suffering, by the praise given him for his courage; when he can take a pride in giving such marks of his manliness, and can prefer the reputation of being brave and stout, to the avoiding a little pain, or the shrinking under it; you need not despair in time, and by the assistance of his growing reason, to master his timorousness, and mend the weakness of his constitution. As he grows bigger, he is to be set upon bolder attempts than his natural temper carries him to; and whenever he is observed to flinch from what one has reason to think he would come off well in, if he had but courage to undertake; that he should be assisted in at first, and by degrees shamed to, till at last practice has given more assurance, and with it a mastery, which must be rewarded with great praise, and the good opinion of others, for his performance. When by these steps he has got resolution enough not to be deterred from what he ought to do, by the apprehension of danger; when fear does not, in sudden or hazardous occurrences, discompose his mind, set his body a trembling, and make him unfit for action, or run away from it; he has then the courage of a rational creature; and such an hardiness we should endeavor by custom and use to bring children to, as proper occasions come in our way.

CRUELTY.

110. One thing I have frequently observed in children, that, when they have got possession of any poor creature, they are apt to use it ill; they often torment and treat very roughly young birds, butterflies, and such other poor animals, which fall into their hands, and that with a seeming kind of pleasure. This, I think, should be watched in them; and if they incline to any such cruelty, they should be taught the contrary usage; for the custom of torment-

ing and killing of beasts will, by degrees, harden their minds even towards men; and they who delight in the suffering and destruction of inferior creatures, will not be apt to be very compassionate or benign to those of their own kind. Our practice takes notice of this, in the exclusion of butchers from juries of life and death. Children should from the beginning be bred up in an abhorrence of killing or tormenting any living creature, and be taught not to spoil or destroy any thing unless it be for the preservation or advantage of some other that is nobler. And truly, if the preservation of all mankind, as much as in him lies, where every one's persuasion, as indeed it is every one's duty, and the true principle to regulate our religion, politics, and morality by, the world would be much quieter, and better-natured than it is. But to return to our present business; I can not but commend both the kindness and prudence of a mother I knew, who was wont always to indulge her daughters, when any of them desired dogs, squirrels, birds, or any such things, as young girls use to be delighted with; but then, when they had them, they must be sure to keep them well, and look diligently after them, that they wanted nothing, or were not ill used; for, if they were negligent in their care of them, it was counted a great fault, which often forfeited their possession; or, at least, they failed not to be rebuked for it, whereby they were early taught diligence and good-nature. And, indeed, I think people should be accustomed, from their cradles, to be tender to all sensible creatures, and to spoil or waste nothing at all.

This delight they take in doing of mischief (whereby I mean spoiling of any thing to no purpose, but more especially the pleasure they take to put any thing in pain that is capable of it,) I can not persuade myself to be any other than a foreign and introduced disposition, an habit borrowed from custom and conversation. People teach children to strike, and laugh when they hurt, or see harm come to others; and they have the examples of most about them to confirm them in it. All the entertainment of talk and history is of nothing almost but fighting and killing; and the honor and renown that is bestowed on conquerors (who for the most part are but the great butchers of mankind) farther mislead growing youths, who by this means come to think slaughter the laudable business of mankind, and the most heroic of virtues. By these steps unnatural cruelty is planted in us; and what humanity abhors, custom reconciles and recommends to us by laying it in the way to honor. Thus, by fashion and opinion, that comes to be a pleasure, which in itself neither is, nor can be any. This ought carefully to be watched, and early remedied, so as to settle and cherish the contrary and more natural temper of benignity and compassion in the room of it; but still by the same gentle methods, which are to be applied to the other two faults before mentioned. It may not perhaps be unreasonable here to add this farther caution, viz., that the mischiefs or harms that come by play, inadvertency, or ignorance, and were not known to be harms, or designed for mischief's sake, though they may perhaps be sometimes of considerable damage, yet are not at all, or but very gently, to be taken notice of. For this, I think, I can not too often inculcate, that whatever miscarriage a child is guilty of, and whatever be the consequence of it, the thing to be regarded in taking notice of it, is only what root it springs from, and what habit it is like to establish; and to that the correction ought to be directed, and the child not to suffer any punishment for any harm which may have come by his play or inadvertency. The faults to be amended lie in the mind; and if they are such as either

age will cure, or no ill habits will follow from, the present action, whatever displeasing circumstances it may have, is to be passed by without any animadversion.

111. Another way to instill sentiments of humanity, and to keep them lively in young folks, will be to accustom them to civility, in their language and deportment towards their inferiors, and the meaner sort of people, particularly servants. It is not unusual to observe the children, in gentlemen's families, treat the servants of the house with domineering words, names of contempt, and an imperious carriage, as if they were of another race, and species beneath them. Whether ill example, the advantage of fortune, or their natural vanity, inspire this haughtiness, it should be prevented, or weeded out; and a gentle, courteous, affable carriage towards the lower ranks of men, placed in the room of it. No part of their superiority will be hereby lost, but the distinction increased, and their authority strengthened, when love in inferiors is joined to outward respect, and an esteem of the person has a share in their submission; and domestics will pay a more ready and cheerful service, when they find themselves not spurned, because fortune has laid them below the level of others, at their master's feet. Children should not be suffered to lose the consideration of human nature in the shufflings of outward conditions; the more they have, the better humored they should be taught to be, and the more compassionate and gentle to those of their brethren, who are placed lower, and have scantier portions. If they are suffered from their cradles to treat men ill and rudely, because by their father's title, they think they have a little power over them: at best it is ill-bred; and, if care be not taken, will, by degrees, nurse up their natural pride into an habitual contempt of those beneath them; and where will that probably end, but in oppression and cruelty?

CURIOSITY.

112. Curiosity in children, (which I had occasion just to mention, §102,) is but an appetite after knowledge, and therefore ought to be encouraged in them, not only as a good sign, but as the great instrument nature has provided, to remove that ignorance they were born with, and which without this busy inquisitiveness will make them dull and useless creatures. The ways to encourage it, and keep it active and busy, are, I suppose, these following:—

1. Not to check or discountenance any inquiries he shall make, nor suffer them to be laughed at; but to answer all his questions, and explain the matters he desires to know, so as to make them as much intelligible to him, as suits the capacity of his age and knowledge. But confound not his understanding with explications or notions that are above it, or with the variety or number of things that are not to his present purpose. Mark what it is his mind aims at in the question, and not what words he expresses it in: and, when you have informed and satisfied him in that, you shall see how his thoughts will enlarge themselves, and how by fit answers he may be led on farther than perhaps you could imagine. For knowledge is grateful to the understanding, as light to the eyes: children are pleased and delighted with it exceedingly, especially if they see that their inquiries are regarded, and that their desire of knowing is encouraged and commended. And I doubt not but one great reason, why many children abandon themselves wholly to silly sports, and trifle away all their time insipidly, is, because they have found their curiosity baulked, and their inquiries neglected. But had they been treated with more kindness and respect,

and their questions answered, as they should, to their satisfaction, I doubt not but they would have taken more pleasure in learning, and improving their knowledge, wherein there would be still newness and variety, which is what they are delighted with, than in returning over and over to the same play and playthings.

113. 2. To this serious answering their questions, and informing their understandings in what they desire, as if it were a matter that needed it, should be added some peculiar ways of commendation. Let others, whom they esteem, be told before their faces of the knowledge they have in such and such things; and since we are all, even from our cradles, vain and proud creatures, let their vanity be flattered with things that will do them good; and let their pride set them on work on something which may turn to their advantage. Upon this ground you shall find, that there can not be a greater spur to the attaining what you would have the elder learn and know himself, than to set him upon teaching it his younger brothers and sisters.

114. 3. As children's inquiries are not to be slighted, so also great care is to be taken, that they never receive deceitful and illuding answers. They easily perceive when they are slighted or deceived, and quickly learn the trick of neglect, dissimulation, and falsehood, which they observe others to make use of. We are not to intrench upon truth in any conversation, but least of all with children; since, if we play false with them, we not only deceive their expectation, and hinder their knowledge, but corrupt their innocence, and teach them the worst of vices. They are travelers newly arrived in a strange country, of which they know nothing: we should, therefore, make conscience not to mislead them. And though their questions seem sometimes not very material, yet they should be seriously answered; for however they may appear to us, (to whom they are long since known,) inquiries not worth making, they are of moment to those who are wholly ignorant. Children are strangers to all we are acquainted with; and all the things they meet with, are at first unknown to them, as they once were to us: and happy are they who meet with civil people, that will comply with their ignorance, and help them to get out of it.

If you or I should be set down in Japan, with all our prudence and knowledge about us, a conceit whereof makes us perhaps so apt to slight the thoughts and inquiries of children: should we, I say, be set down in Japan, we should, no doubt, (if we would inform ourselves of what is there to be known,) ask a thousand questions, which, to a supercilious or inconsiderate Japanese, would seem very idle and impertinent; though to us they would be very material, and of importance to be resolved; and we should be glad to find a man so complaisant and courteous, as to satisfy our demands, and instruct our ignorance.

When any new thing comes in their way, children usually ask the common question of a stranger, What is it? whereby they ordinarily mean nothing but the name; and, therefore, to tell them how it is called, is usually the proper answer to that demand. The next question usually is, What is it for? And to this it should be answered truly and directly: the use of the thing should be told, and the way explained, how it serves to such a purpose, as far as their capacities can comprehend it; and so of any other circumstances they shall ask about it; not turning them going, till you have given them all the satisfaction they are capable of, and so leading them by your answers into farther questions. And perhaps to a grown man such conversation will not be altogether so idle and insignificant, as we are apt to imagine. The native and untaught

suggestions of inquisitive children do often offer things that may set a considering man's thoughts on work. And I think there is frequently more to be learned from the unexpected questions of a child, than the discourses of men, who talk in a road, according to the notions they have borrowed, and the prejudices of their education.

115. 4. Perhaps it may not sometimes be amiss to excite their curiosity, by bringing strange and new things in their way, on purpose to engage their inquiry, and give him occasion to inform themselves about them; and if by chance their curiosity leads them to ask what they should not know, it is a great deal better to tell them plainly, that it is a thing that belongs not to them to know, than to pop them off with a falsehood, or a frivolous answer.

116. Pertness, that appears sometimes so early, proceeds from a principle that seldom accompanies a strong constitution of body, or ripens into a strong judgment of mind. If it were desirable to have a child a more brisk talker, I believe there might be ways found to make him so; but, I suppose, a wise father had rather that his son should be able and useful, when a man, than pretty company, and a diversion to others, whilst a child; though, if that too were to be considered, I think I may say, there is not so much pleasure to have a child prattle agreeably, as to reason well. Encourage, therefore, his inquisitiveness all you can, by satisfying his demands, and informing his judgment, as far as it is capable. When his reasons are any way tolerable, let him find the credit and commendation of them; and when they are quite out of the way, let him, without being laughed at for his mistake, be gently put into the right; and if he show a forwardness to be reasoning about things that come in his way, take care, as much as you can, that nobody check this inclination in him, or mislead it by captious or fallacious ways of talking with him: for, when all is done, this, as the highest and most important faculty of our minds, deserves the greatest care and attention in cultivating it; the right improvement and exercise of our reason being the highest perfection that a man can attain to in this life.

SAUNTERING.

117. Contrary to this busy inquisitive temper, there is sometimes observable in children a listless carelessness, a want of regard to any thing, and a sort of trifling, even at their business. This sauntering humor I look on as one of the worst qualities can appear in a child, as well as one of the hardest to be cured, where it is natural. But it being liable to be mistaken in some cases, care must be taken to make a right judgment concerning that trifling at their books or business, which may sometimes be complained of in a child. Upon the first suspicion a father has, that his son is of a sauntering temper, he must carefully observe him, whether he be listless and indifferent in all his actions, or whether in some things alone he be slow and sluggish, but in others vigorous and eager: for though he find that he does loiter at his book, and let a good deal of the time he spends in his chamber or study, run idly away, he must not presently conclude, that this is from a sauntering humor in his temper; it may be childishness, and a preferring something to his study, which his thoughts run on; and he dislikes his book, as is natural, because it is forced upon him as a task. To know this perfectly, you must watch him at play, when he is out of his place and time of study, following his own inclinations; and see there, whether he be stirring and active; whether he designs any thing, and with labor and eagerness pursues it, till he

has accomplished what he aimed at; or whether he lazily and listlessly dreams away his time. If this sloth be only when he is about his book, I think it may be easily cured; if it be in his temper, it will require a little more pains and attention to remedy it.

118. If you are satisfied, by his earnestness at play, or any thing else he sets his mind on, in the intervals between his hours of business, that he is not of himself inclined to laziness, but that only want of relish of his book makes him negligent and sluggish in his application to it; the first step is to try, by talking to him kindly of the folly and inconvenience of it, whereby he loses a good part of his time, which he might have for his diversion: but be sure to talk calmly and kindly, and not much at first, but only these plain reasons in short. If this prevails, you have gained the point in the most desirable way, which is that of reason and kindness. If this softer application prevails not, try to shame him out of it, by laughing at him for it, asking every day, when he comes to the table, if there be no strangers there, "how long he was that day about his business?" And if he has not done it, in the time he might be well supposed to have dispatched it, expose and turn him into ridicule for it; but mix no chiding, only put on a pretty cold brow towards him, and keep it till he reform; and let his mother, tutor, and all about him do so too. If this work not the effect you desire, then tell him, "he shall be no longer troubled with a tutor to take care of his education: you will not be at the charge to have him spend his time idly with him; but since he prefers this or that, [whatever play he delights in,] to his book, that only he shall do;" and so in earnest set him to work on his beloved play, and keep him steadily, and in earnest to it, morning and afternoon, till he be fully surfeited, and would, at any rate, change it for some hours at his book again: but when you thus set him his task of play, you must be sure to look after him yourself, or set somebody else to do it, that may constantly see him employed in it, and that he be not permitted to be idle at that too. I say, yourself look after him; for it is worth the father's while, whatever business he has, to bestow two or three days upon his son, to cure so great a mischief as his sauntering at his business.

119. This is what I propose, if it be idleness, not from his general temper, but a peculiar or acquired aversion to learning, which you must be careful to examine and distinguish. But though you have your eyes upon him, to watch what he does with the time which he has at his own disposal, yet you must not let him perceive that you, or any body else do so; for that may hinder him from following his own inclinations, which he being full of, and not daring, for fear of you, to prosecute what his head and heart are set upon, he may neglect all other things, which then he relishes not, and so may seem to be idle and listless, when, in truth, it is nothing but being intent on that, which the fear of your eye or knowledge keeps him from executing. To be clear in this point, the observation must be made when you are out of the way, and he not so much as under the restraint of a suspicion that any body has an eye upon him. In those seasons of perfect freedom, let somebody you can trust mark how he spends his time, whether he inactively loiters it away, when, without any check, he is left to his own inclination. Thus, by his employing of such times of liberty, you will easily discern whether it be listlessness in his temper, or aversion to his book, that makes him saunter away his time of study.

120. If some defect in his constitution has cast a damp on his mind, and he be naturally listless and dreaming, this unpromising disposition is none of the

easiest to be dealt with; because, generally carrying with it an unconcernedness for the future, it wants the two great springs of action, foresight and desire; which, how to plant and increase, where nature has given a cold and contrary temper, will be the question. As soon as you are satisfied that this is the case, you must carefully inquire whether there be nothing he delights in; inform yourself what it is he is most pleased with; and if you can find any particular tendency his mind hath, increase it all you can, and make use of that to set him on work, and to excite his industry. If he loves praise, or play, or fine clothes, &c., or, on the other side, dreads pain, disgrace, or your displeasure, &c., whatever it be that he loves most, except it be sloth, (for that will never set him on work,) let that be made use of to quicken him, and make him bestir himself; for in this listless temper you are not to fear an excess of appetite, (as in all other cases,) by cherishing it. It is that which you want, and, therefore, must labor to raise and increase; for, where there is no desire, there will be no industry.

121. If you have not hold enough upon him this way, to stir up vigor and activity in him, you must employ him in some constant bodily labor, whereby he may get an habit of doing something; the keeping him hard to some study were the better way to get him an habit of exercising and applying his mind. But because this is an invisible attention, and nobody can tell when he is, or is not idle at it, you must find bodily employments for him, which he must be constantly busied in, and kept to; and, if they have some little hardship and shame in them, it may not be the worse, that they may the sooner weary him, and make him desire to return to his book: but be sure when you exchange his book for his other labor, set him such a task, to be done in such a time, as may allow him no opportunity to be idle. Only, after you have by this way brought him to be attentive and industrious at his book, you may, upon his dispatching his study within the time set him, give him as a reward, some respite from his other labor; which you may diminish, as you find him grow more and more steady in his application; and, at last, wholly take off, when his sauntering at his books is cured.

COMPULSION.

122. We formerly observe, that variety and freedom was that which delighted children, and recommended their plays to them; and that, therefore, their book, or any thing we would have them learn, should not be enjoined them as business. This their parents, tutors, and teachers, are apt to forget; and their impatience to have them busied in what is fit for them to do, suffers them not to deceive them into it; but by the repeated injunctions they meet with, children quickly distinguish between what is required of them, and what not. When this mistake has once made his book uneasy to him, the cure is to be applied at the other end. And since it will be then too late to endeavor to make it a play to him, you must take the contrary course; observe what play he is most delighted with; enjoin that, and make him play so many hours every day, not as a punishment for playing, but as if it were the business required of him. This, if I mistake not, will in a few days, make him so weary of his most beloved sport, that he will prefer his book, or any thing to it, especially if it may redeem him from any part of the task of play is set him; and he may be suffered to employ some part of the time destined to his task of play in his book, or such other exercise as is really useful to him. This I at least think a better cure than that forbidding, (which usually increases the desire,) or any other

punishment should be made use of to remedy it; for, when you have once glutted his appetite, (which may safely be done in all things but eating and drinking,) and made him surfeit of what you would have him avoid, you have put into him a principle of aversion, and you need not so much fear afterwards his longing for the same thing again.

123. This, I think, is sufficiently evident, that children generally hate to be idle: all the care then is, that their busy humor should be constantly employed in something of use to them; which if you will attain, you must make what you would have them do, a recreation to them, and not a business. The way to do this, so that they may not perceive you have any hand in it, is this proposed here, viz., to make them weary of that which you would not have them do, by enjoining and making them, under some pretense or other, do it till they are surfeited. For example; does your son play at top and scourge too much? Enjoin him to play so many hours every day, and look that he do it; and you shall see he will quickly be sick of it, and willing to leave it. By this means making the recreations you dislike a business to him, he will of himself, with delight, betake himself to those things you would have him do, especially if they be proposed as rewards for having performed his task in that play which is commanded him. For, if he be ordered every day to whip his top, so long as to make him sufficiently weary, do you not think he will apply himself with eagerness to his book, and wish for it, if you promise it him as a reward of having whipped his top lustily, quite out all the time that is set him? Children, in the things they do, if they comport with their age, find little difference, so they may be doing: the esteem they have for one thing above another, they borrow from others; so that what those about them make to be a reward to them, will really be so. By this art, it is in their governor's choice, whether scotch-hoppers shall reward their dancing, or dancing their scotch-hoppers; whether peg-top, or reading, playing at trap, or studying the globes, shall be more acceptable and pleasing to them; all that they desire being to be busy, as they imagine, in things of their own choice, and which they receive as favors from their parents, or others for whom they have a respect and with whom they would be in credit. A set of children thus ordered, and kept from the ill example of others, would, all of them, I suppose, with as much earnestness and delight, learn to read, write, and what else one would have them, as others do their ordinary plays: and the eldest being thus entered, and this made the fashion of the place, it would be as impossible to hinder them from learning the one, as it is ordinarily to keep them from the other.

PLAY-GAMES.

124. Playthings, I think, children should have, and of divers sorts; but still to be in the custody of their tutors, or somebody else, whereof a child should have in his power but one at once, and should not be suffered to have another, but when he restored that; this teaches them, betimes, to be careful of not losing or spoiling the things they have; whereas plenty and variety, in their own keeping, makes them wanton and careless, and teaches them from the beginning to be squanderers and wasters. These, I confess, are little things, and such as will seem beneath the care of a governor; but nothing that may form children's minds is to be overlooked and neglected; and whatsoever introduces habits, and settles customs in them, deserves the care and attention of their governors, and is not a small thing in its consequences.

One thing more about children's playthings may be worth their parents' care: though it be agreed they should have of several sorts, yet, I think, they should have none bought for them. This will hinder that great variety they are often overcharged with, which serves only to teach the mind to wander after change and superfluity, to be unquiet, and perpetually stretching itself after something more still, though it knows not what, and never to be satisfied with what it hath. The court that is made to people of condition in such kind of presents to their children, does the little ones great harm; by it they are taught pride, vanity, and covetousness, almost before they can speak; and I have known a young child so distracted with the number and variety of his play-games, that he tired his maid every day to look them over; and was so accustomed to abundance, that he never thought he had enough, but was always asking, What more? What more? What new thing shall I have? A good introduction to moderate desires, and the ready way to make a contented happy man.

How then shall they have the play-games you allow them, if none must be bought for them? I answer, they should make them themselves, or at least endeavor it, and set themselves about it; till then they should have none, and till then, they will want none of any great artifice. A smooth pebble, a piece of paper, the mother's bunch of keys, or any thing they can not hurt themselves with, serves as much to divert little children, as those more chargeable and curious toys from the shops, which are presently put out of order and broken. Children are never dull or out of humor for want of such playthings, unless they have been used to them; when they are little, whatever occurs, serves the turn; and as they grow bigger, if they are not stored by the expensive folly of others, they will make them themselves. Indeed, when they once begin to set themselves to work about any of their inventions, they should be taught and assisted; but should have nothing whilst they lazily sit still, expecting to be furnished from other hands without employing their own: and if you help them where they are at a stand, it will more endear you to them, than any chargeable toys you shall buy for them. Playthings which are above their skill to make, as tops, gigs, battledores, and the like, which are to be used with labor, should, indeed, be procured them: these, it is convenient, they should have, not for variety, but for exercise; but these, too, should be given them as bare as might be. If they had a top, the scourge-stick and leather-strap should be left to their own making and fitting. If they sit gaping to have such things drop into their mouths, they should go without them. This will accustom them to seek for what they want in themselves, and in their own endeavors; whereby they will be taught moderation in their desires, application, industry, thought, contrivance, and good husbandry; qualities that will be useful to them when they are men, and therefore, can not be learned too soon, nor fixed too deep. All the plays and diversions of children should be directed towards good and useful habits, or else they will introduce ill ones. Whatever they do, leaves some impression on that tender age, and from thence they receive a tendency to good or evil: and whatever hath such an influence, ought not to be neglected.

LYING.

125. Lying is so ready and cheap a cover for any miscarriage, and so much in fashion amongst all sorts of people, that a child can hardly avoid observing the use is made of it on all occasions, and so can scarce be kept, without great care, from getting into it. But it is so ill a quality, and the mother of so many

ill ones, that spawn from it, and take shelter under it, that a child should be brought up in the greatest abhorrence of it imaginable: it should be always, (when occasionally it comes to be mentioned,) spoken of before him with the utmost detestation, as a quality so wholly inconsistent with the name and character of a gentleman, that nobody of any credit can bear the imputation of a lie; a mark that is judged the utmost disgrace, which debases a man to the lowest degree of a shameful meanness, and ranks him with the most contemptible part of mankind, and the abhorred rascality; and is not to be endured in any one, who would converse with people of condition, or have any esteem or reputation in the world. The first time he is found in a lie, it should rather be wondered at, as a monstrous thing in him, than reproved as an ordinary fault. If that keeps him not from relapsing, the next time he must be sharply rebuked, and fall into the state of great displeasure of his father and mother, and all about him who take notice of it. And if this way work not the cure, you must come to blows; for, after he has been thus warned, a premeditated lie must always be looked upon as obstinacy, and never be permitted to escape unpunished.

EXCUSES.

126. Children afraid to have their faults seen in their naked colors, will, like the rest of the sons of Adam, be apt to make excuses. This is a fault usually bordering upon, and leading to untruth, and is not to be indulged in them: but yet it ought to be cured rather with shame than roughness. If, therefore, when a child is questioned for anything, his first answer be an excuse, warn him soberly to tell the truth; and then, if he persists to shuffle it off with a falsehood, he must be chastised; but, if he directly confess, you must commend his ingenuity, and pardon the fault, be it what it will; and pardon it so, that you never so much as reproach him with it, or mention it to him again; for, if you would have him in love with ingenuity, and by a constant practice make it habitual to him, you must take care that it never procure him the least inconvenience; but, on the contrary, his own confession, bringing always with it perfect impunity, should be, besides, encouraged by some marks of approbation. If his excuse be such at any time, that you can not prove it to have any falsehood in it, let it pass for true, and be sure not to show any suspicion of it. Let him keep up his reputation with you as high as is possible; for when once he finds he has lost that, you have lost a great and your best hold upon him. Therefore, let him not think he has the character of a liar with you, as long as you can avoid it without flattering him in it. Thus, some slips in truth may be overlooked. But, after he has once been corrected for a lie, you must be sure never after to pardon it in him, whenever you find, and take notice to him, that he is guilty of it: for it being a fault which he has been forbid, and may, unless he be willful, avoid, the repeating of it is perfect perverseness, and must have the chastisement due to that offense.

127. This is what I have thought concerning the general method of educating a young gentleman; which, though I am apt to suppose may have some influence on the whole course of his education, yet I am far from imagining it contains all those particulars which his growing years, or peculiar temper, may require. But this being premised in general, we shall, in the next place, descend to a more particular consideration of the several parts of his education.

128. That which every gentleman, (that takes any care of his education,)

desires for his son, besides the estate he leaves him, is contained, (I suppose,) in these four things, virtue, wisdom, breeding and learning. I will not trouble myself whether these names do not some of them sometimes stand for the same thing, or really include one another. It serves my turn here to follow the popular use of these words, which I presume is clear enough to make me be understood, and I hope there will be no difficulty to comprehend my meaning.

129. I place virtue as the first and most necessary of those endowments that belong to a man or a gentleman, as absolutely requisite to make him valued and beloved by others, acceptable or tolerable to himself. Without that, I think, he will be happy neither in this nor the other world.

GOD.

130. As the foundation of this, there ought very early to be imprinted on his mind, a true notion of God, as of the independent Supreme Being, Author and Maker of all things, from whom we receive all our good, who loves us, and gives us all things: and, consequent to this, instill into him a love and reverence of this Supreme Being. This is enough to begin with, without going to explain this matter any farther, for fear lest by talking too early to him of spirits, and being unseasonably forward to make him understand the incomprehensible nature of that infinite Being, his head be either filled with false, or perplexed with unintelligible notions of him. Let him only be told upon occasion, that God made and governs all things, hears and sees every thing, and does all manner of good to those that love and obey him. You will find, that being told of such a God, other thoughts will be apt to rise up fast enough in his mind about him; which, as you observe them to have any mistakes, you must set right. And I think it would be better, if men generally rested in such an idea of God, without being too curious in their notions about a Being, which all must acknowledge incomprehensible; whereby many who have not strength and clearness of thought to distinguish between what they can, and what they can not know, run themselves into superstition or atheism, making God like themselves, or, (because they can not comprehend any thing else,) none at all. And I am apt to think the keeping of children constantly morning and evening to acts of devotion to God, as to their Maker, Preserver and Benefactor, in some plain and short form of prayer, suitable to their age and capacity, will be of much more use to them in religion, knowledge, and virtue, than to distract their thoughts with curious inquiries into his inscrutable essence and being.

SPIRITS.

131. Having by gentle degrees, as you find him capable of it, settled such an idea of God in his mind, and taught him to pray to him, and praise him as the Author of his being, and of all the good he does or can enjoy, forbear any discourse of other spirits, till the mention of them coming in his way, upon occasion hereafter to be set down, and his reading the Scripture-history, put him upon that inquiry.

GOBLINS.

132. But even then, and always whilst he is young, be sure to preserve his tender mind from all impressions and notions of spirits and goblins, or any fearful apprehensions in the dark. This he will be in danger of from the indiscretion of servants, whose usual method is to awe children, and keep them in subjection, by telling them of raw-head and bloody-bones, and such other

names, as carry with them the ideas of something terrible and hurtful, which they have reason to be afraid of, when alone, especially in the dark. This must be carefully prevented; for though by this foolish way they may keep them from little faults, yet the remedy is much worse than the disease; and there are stamped upon their imaginations ideas that follow them with terror and affrightment. Such bugbear thoughts, once got into the tender minds of children, and being set on with a strong impression from the dread that accompanies such apprehensions, sink deep, and fasten themselves so, as not easily, if ever, to be got out again; and, whilst they are there, frequently haunt them with strange visions, making children dastards when alone, and afraid of their shadows and darkness all their lives after. I have had those complain to me, when men, who had been thus used when young; that, though their reason corrected the wrong ideas they had taken in, and they were satisfied, that there was no cause to fear invisible beings more in the dark than in the light; yet that these notions were apt still, upon any occasion, to start up first in their prepossessed fancies, and not to be removed without some pains. And, to let you see how lasting frightful images are, that take place in the mind early, I shall here tell you a pretty remarkable, but true story: there was in a town in the west, a man of a disturbed brain, whom the boys used to tease, when he came in their way: this fellow one day, seeing in the street one of those lads that used to vex him, stepped into a cutler's shop he was near, and there seizing on a naked sword, made after the boy, who seeing him coming so armed, betook himself to his feet, and ran for his life, and by good luck had strength and heels enough to reach his father's house, before the madman could get up to him: the door was only latched; and when he had the latch in his hand, he turned about his head to see how near his pursuer was, who was at the entrance of the porch, with his sword up ready to strike; and he had just time to get in and clap to the door to avoid the blow, which, though his body escaped, his mind did not. This frightening idea made so deep an impression there, that it lasted many years, if not all his life after; for telling this story when he was a man, he said, that after that time till then, he never went in at that door, (that he could remember,) at any time, without looking back, whatever business he had in his head, or how little soever, before he came thither, he thought of this madman.

If children were let alone, they would be no more afraid in the dark than in broad sunshine; they would in their turns as much welcome the one for sleep, as the other to play in: there should be no distinction made to them, by any discourse, of more danger, or terrible things in the one than the other. But, if the folly of any one about them should do them this harm, and make them think there is any difference between being in the dark and winking, you must get it out of their minds as soon as you can; and let them know, that God, who made all things good for them, made the night, that they might sleep the better and quieter; and that they being under his protection, there is nothing in the dark to hurt them. What is to be known more of God and good spirits, is to be deferred till the time we shall hereafter mention; and of evil spirits, it will be well if you can keep him from wrong fancies about them, till he is ripe for that sort of knowledge.

TRUTH. GOOD-NATURE.

133. Having laid the foundations of virtue in a true notion of a God, such as the creed wisely teaches, as far as his age is capable, and by accustoming him to

pray to him; the next thing to be taken care of, is to keep him exactly to speaking of truth, and by all the ways imaginable inclining him to be good-natured. Let him know, that twenty faults are sooner to be forgiven than the straining of truth, to cover any one by an excuse: and to teach him betimes to love and be good-natured to others, is to lay early the true foundation of an honest man; all injustice generally springing from too great love of ourselves, and too little of others.

This is all I shall say of this matter in general, and is enough for laying the first foundations of virtue in a child. As he grows up, the tendency of his natural inclination must be observed; which, as it inclines him, more than is convenient, on one or the other side, from the right path of virtue, ought to have proper remedies applied; for few of Adam's children are so happy as not to be born with some bias in their natural temper, which it is the business of education either to take off, or counterbalance: but to enter into particulars of this, would be beyond the design of this short treatise of education. I intend not a discourse of all the virtues and vices, and how each virtue is to be attained, and every particular vice by its peculiar remedies cured; though I have mentioned some of the most ordinary faults, and the ways to be used in correcting them.

WISDOM.

134. Wisdom I take, in the popular acceptation, for a man's managing his business ably, and with foresight, in this world. This is the product of a good natural temper, application of mind and experience together, and so above the reach of children. The greatest thing that in them can be done towards it, is to hinder them, as much as may be, from being cunning; which being the ape of wisdom, is the most distant from it that can be: and, as an ape, for the likeness it has to a man, wanting what really should make him so, is by so much the uglier; cunning is only the want of understanding; which, because it can not compass its ends by direct ways, would do it by a trick and circumvention; and the mischief of it is, a cunning trick helps but once, but hinders ever after. No cover was ever made either so big, or so fine, as to hide itself. Nobody was ever so cunning, as to conceal their being so: and when they are once discovered, every body is shy, every body distrustful of crafty men; and all the world forwardly join to oppose and defeat them: whilst the open, fair, wise man has every body to make way for him, and goes directly to his business. To accustom a child to have true notions of things, and not to be satisfied till he has them; to raise his mind to great and worthy thoughts; and to keep him at a distance from falsehood, and cunning, which has always a broad mixture of falsehood in it; is the fittest preparation of a child for wisdom. The rest, which is to be learned from time, experience, and observation, and an acquaintance with men, their tempers and designs, is not to be expected in the ignorance and inadvertency of childhood, or the inconsiderate heat and unweariness of youth: all that can be done towards it, during this unripe age, is, as I have said, to accustom them to truth and sincerity; to a submission to reason; and, as much as may be, to reflection on their own actions.

BREEDING.

135. The next good quality belonging to a gentleman, is good-breeding. There are two sorts of ill-breeding; the one a sheepish bashfulness; and the

other, a misbecoming negligence and disrespect in our carriage; both which are avoided, by duly observing this one rule, Not to think meanly of ourselves, and not to think meanly of others.

136. The first part of this rule must not be understood in opposition to humility, but to assurance. We ought not to think so well of ourselves, as to stand upon our own value; and assume to ourselves a preference before others, because of any advantage we may imagine we have over them; but modestly to take what is offered, when it is our due. But yet we ought to think so well of ourselves, as to peform those actions which are incumbent on, and expected of us, without discomposure or disorder, in whose presence soever we are, keeping that respect and distance which is due to every one's rank and quality. There is often in people, especially children, a clownish shamefacedness before strangers, or those above them; they are confounded in their thoughts, words, and looks, and so lose themselves in that confusion, as not to be able to do any thing, or at least not to do it with that freedom and gracefulness which pleases, and makes them acceptable. The only cure for this, as for any other miscarriage, is by use to introduce the contrary habit. But since we can not accustom ourselves to converse with strangers, and persons of quality, without being in their company, nothing can cure this part of ill-breeding but change and variety of company, and that of persons above us.

137. As the before-mentioned consists in too great a concern how to behave ourselves towards others, so the other part of ill-breeding lies in the appearance of too little care of pleasing or showing respect to those we have to do with. To avoid this these two things are requisite: first, a disposition of the mind not to offend others; and secondly, the most acceptable and agreeable way of expressing that disposition. From the one, men are called civil; from the other, well-fashioned. The latter of these is that decency and gracefulness of looks, voice, words, motions, gestures, and of all the whole outward demeanor, which takes in company, and makes those with whom we may converse easy and well pleased. This is, as it were, the language whereby that internal civility of the mind is expressed; which, as other languages are, being very much governed by the fashion and custom of every country, must in the rules and practice of it, be learned chiefly from observation, and the carriage of those who are allowed to be exactly well-bred. The other part, which lies deeper than the outside, is that general good-will and regard for all people, which makes any one have a care not to show, in his carriage, any contempt, disrespect, or neglect of them; but to express, according to the fashion and way of that country, a respect and value for them, according to their rank and condition. It is a disposition of the mind that shows itself in the carriage, whereby a man avoids making any one uneasy in conversation.

I shall take notice of four qualities, that are most directly opposite to this first and most taking of all the social virtues. And from some one of these four, it is, that incivility commonly has its rise. I shall set them down, that children may be preserved or recovered from their ill influence.

ROUGHNESS.

1. The first is a natural roughness, which makes a man uncomplaisant to others, so that he has no deference for their inclinations, tempers, or conditions. It is the sure badge of a clown, not to mind what pleases or displeases those he is with; and yet one may often find a man, in fashionable clothes, give an un-

bounded swing to his own humor, and suffer it to justle or overrun any one that stands in its way, with a perfect indifferency how they take it. This is a brutality that every one sees and abhors, and nobody can be easy with: and therefore this finds no place in any one, who would be thought to have the least tincture of good-breeding. For the very end and business of good-breeding is to supple the natural stiffness, and so soften men's tempers, that they may bend to a compliance, and accommodate themselves to those they have to do with.

CONTEMPT.

2. Contempt, or want of due respect, discovered either in looks, words, or gestures: this, from whomsoever it comes, brings always uneasiness with it; for nobody can contentedly bear being slighted.

CENSORIOUSNESS. RAILLERY.

3. Censoriousness, and finding fault with others, has a direct opposition to civility. Men, whatever they are, or are not guilty of, would not have their faults displayed, and set in open view and broad daylight, before their own, or other people's eyes. Blemishes affixed to any one, always carry shame with them: and the discovery, or even bare imputation of any defect, is not borno without some uneasiness. Raillery is the most refined way of exposing the faults of others; but, because it is usually done with wit and good language, and gives entertainment to the company, people are led into a mistake, and, where it keeps within fair bounds, there is no incivility in it: and so the pleasantry of this sort of conversation often introduces it amongst people of the better rank; and such talkers are favorably heard, and generally applauded by the laughter of the by-standers on their side: but they ought to consider, that the entertainment of the rest of the company is at the cost of that one, who is set out in their burlesque colors, who, therefore, is not without uneasiness, unless the subject, for which he is rallied, be really in itself matter of commendation; for then the pleasant images and representations which make the raillery, carrying praise as well as sport with them, the rallied person also finds his account, and takes part in the diversion. But, because the nice management of so nice and ticklish a business, wherein a little slip may spoil all, is not every body's talent, I think those, who would secure themselves from provoking others, especially all young people, should carefully abstain from raillery; which, by a small mistake, or any wrong turn, may leave upon the mind of those, who are made uneasy by it, the lasting memory of having been piquantly, though wittily, taunted for something censurable in them.

CONTRADICTION.

Besides raillery, contradiction is a kind of censoriousness, where-in ill-breeding often shows itself. Complaisance does not require that we should always admit all the reasonings or relations that the company is entertained with; no, nor silently let pass all that is vented in our hearing. The opposing the opinions, and rectifying the mistakes of others, is what truth and charity sometimes require of us, and civility does not oppose, if it be done with due caution and care of circumstances. But there are some people, that one may observe possessed, as it were, with the spirit of contradiction, that steadily, and without regard to right or wrong, oppose some one, or perhaps every one of the company, whatever they say. This is so visible and outrageous a way of censuring,

that nobody can avoid thinking himself injured by it. All opposition to what another man has said, is so apt to be suspected of censoriousness, and is so seldom received without some sort of humiliation, that it ought to be made in the gentlest manner, and softest words can be found; and such as, with the whole deportment, may express no forwardness to contradict. All marks of respect and good-will ought to accompany it, that whilst we gain the argument, we may not lose the esteem of those that hear us.

CAPTIOUSNESS.

4. Captiousness is another fault opposite to civility, not only because it often produces misbecoming and provoking expressions and carriage, but because it is a tacit accusation and reproach of some incivility, taken notice of in those whom we are angry with. Such a suspicion, or intimation, can not be borne by any one without uneasiness. Besides, one angry body discomposes the whole company, and the harmony ceases upon any such jarring.

The happiness, that all men so steadily pursue, consisting in pleasure, it is easy to see why the civil are more acceptable than the useful. The ability, sincerity, and good intention, of a man of weight and worth, or a real friend, seldom atone for the uneasiness, that is produced by his grave and solid representations. Power and riches, nay virtue itself, are valued only as conducing to our happiness; and, therefore, he recommends himself ill to another as aiming at his happiness, who, in the services he does him, makes him uneasy in the manner of doing them. He that knows how to make those he converses with easy, without debasing himself to low and servile flattery, has found the true art of living in the world, and being both welcome and valued every where. Civility therefore, is what, in the first place, should with great care be made habitual to children and young people.

BREEDING.

138. There is another fault in good manners, and that is, excess of ceremony and an obstinate persisting to force upon another what is not his due, and what he can not take without folly or shame. This seems rather a design to expose, than oblige; or, at least, looks like a contest for mastery; and, at best, is but troublesome, and so can be no part of good-breeding, which has no other use or end, but to make people easy and satisfied in their conversation with us. This is a fault few young people are apt to fall into; but yet, if they are ever guilty of it, or are suspected to incline that way, they should be told of it, and warned of this mistaken civility. The thing they should endeavor and aim at in conversation, should be to show respect, esteem, and good-will, by paying to every one that common ceremony and regard, which is in civility due to them. To do this, without a suspicion of flattery, dissimulation, or meanness, is a great skill, which good sense, reason, and good company, can only teach; but is of so much use in civil life, that it is well worth the studying.

139. Though the managing ourselves well in this part of our behavior has the name of good-breeding, as if peculiarly the effect of education; yet, as I have said, young children should not be much perplexed about it; I mean, about putting off their hats, and making legs modishly. Teach them humility, and to be good-natured, if you can, and this sort of manners will not be wanting: being in truth, nothing but a care not to show any slighting, or contempt, of any one in conversation. What are the most allowed and esteemed ways of

expressing this, we have above observed. It is as peculiar and different, in several countries of the world, as their languages; and, therefore, if it be rightly considered, rules and discourses, made to children about it, are as useless and impertinent, as it would be, now and then, to give a rule or two of the Spanish tongue, to one that converses only with Englishmen. Be as busy as you please with discourses of civility to your son; such as is his company, such will be his manners. A plowman of your neighborhood, that has never been out of his parish, read what lectures you please to him, will be as soon in his language, as his carriage, a courtier; that is, in neither will be more polite, than those he uses to converse with: and, therefore, of this no other care can be taken, till he be of an age to have a tutor put to him, who must not fail to be a well-bred man. And, in good earnest, if I were to speak my mind freely, so children do nothing out of obstinacy, pride, and ill-nature, it is no great matter how they put off their hats, or make legs. If you can teach them to love and respect other people, they will, as their age requires it, find ways to express it acceptably to every one, according to the fashions they have been used to: and as to their notions, and carriage of their bodies, a dancing-master, as has been said, when it is fit, will teach them what is most becoming. In the mean time, when they are young, people expect not that children should be over-mindful of these ceremonies; carelessness is allowed to that age, and becomes them as well as compliments do grown people: or, at least, if some very nice people will think it a fault, I am sure it is a fault that should be overlooked, and left to time, a tutor, and conversation, to cure: and, therefore, I think it not worth your while to have your son, (as I often see children are,) molested or chid about it; but where there is pride, or ill-nature, appearing in his carriage, there he must be persuaded, or shamed out of it.

INTERRUPTION.

Though children when little, should not be much perplexed with rules and ceremonious parts of breeding; yet there is a sort of unmannerliness very apt to grow up with young people, if not early restrained; and that is a forwardness to interrupt others that are speaking, and to stop them with some contradiction. Whether the custom of disputing, and the reputation of parts, and learning usually given to it, as if it were the only standard and evidence of knowledge, make young men so forward to watch occasions to correct others in their discourse, and not to slip any opportunity of showing their talents; so it is, that I have found scholars most blamed in this point. There can not be a greater rudeness, than to interrupt another in the current of his discourse; for, if there be not impertinent folly in answering a man before we know what he will say, yet it is a plain declaration, that we are weary to hear him talk any longer, and have a disesteem of what he says; which we, judging not fit to entertain the company, desire them to give audience to us, who have something to produce worth their attention. This shows a very great disrespect, and can not but be offensive; and yet, this is what almost all interruption constantly carries with it. To which, if there be added, as is usual, a correcting of any mistake, or a contradiction of what has been said, it is a mark of yet greater pride and self-conceitedness, when we thus intrude ourselves for teachers, and take upon us, either to set another right in his story, or show the mistakes of his judgment.

I do not say this, that I think there should be no difference of opinions in

conversation, nor opposition in men's discourses: this would be to take away the greatest advantage of society, and the improvements that are to be made by ingenious company, where the light is to be got from the opposite arguings of men of parts, showing the different sides of things, and their various aspects and probabilities, would be quite lost, if every one were obliged to assent to, and say after the first speaker. It is not the owning one's dissent from another that I speak against, but the manner of doing it. Young men should be taught not to be forward to interpose their opinions, unless asked, or when others have done, and are silent; and then only by way of inquiry, not instruction. The positive asserting, and the magisterial air, should be avoided; and when a general pause of the whole company affords an opportunity, they may modestly put in their question as learners.

This becoming decency will not cloud their parts, nor weaken the strength of their reason; but bespeak the more favorable attention, and give what they say the greater advantage. An ill argument, or ordinary observation, thus introduced, with some civil preface of deference and respect to the opinions of others, will procure them more credit and esteem, than the sharpest wit, or profoundest science, with a rough, insolent, and noisy management; which always shocks the hearers, and leaves an ill opinion of the man, though he get the better of it in the argument.

DISPUTE.

This, therefore, should be carefully watched in young people, stopped in the beginning, and the contrary habit introduced in all their conversation: and the rather, because forwardness to talk, frequent interruptions in arguing, and loud wrangling, are too often observable amongst grown people, even of rank amongst us. The Indians, whom we call barbarous, observe much more decency and civility in their discourses and conversation, giving one another a fair silent hearing, till they have quite done; and then answering them calmly, and without noise or passion. And if it be not so in this civilized part of the world, we must impute it to a neglect in education, which has not yet reformed this ancient piece of barbarity amongst us. Was it not, think you, an entertaining spectacle, to see two ladies of quality accidentally seated on the opposite sides of a room, set round with company, fall into a dispute, and grow so eager in it, that in the heat of their controversy, edging by degrees their chairs forwards, they were in a little time got up close to one another in the middle of the room; where they for a good while managed the dispute as fiercely as two game-cocks in the pit, without minding or taking any notice of the circle, which could not all the while forbear smiling? This I was told by a person of quality, who was present at the combat, and did not omit to reflect upon the indecencies, that warmth in dispute often runs people into; which, since custom makes too frequent, education should take the more care of. There is nobody but condemns this in others, though they overlook it in themselves: and many who are sensible of it in themselves, and resolve against it, can not get rid of an ill custom, which neglect in their education has suffered to settle into an habit.

COMPANY.

140. What has been above said concerning company, would, perhaps, if it were well reflected on, give us a larger prospect, and let us see how much farther its influence reaches. It is not the modes of civility alone, that are

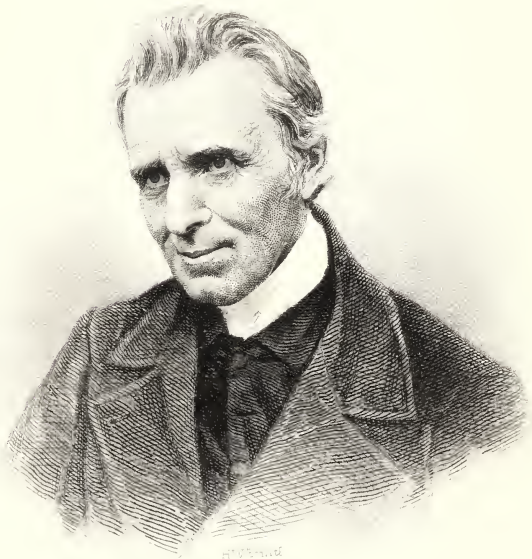
imprinted by conversation; the tincture of company sinks deeper than the outside; and possibly, if a true estimate were made of the morality and religions of the world, we should find, that the far greater part of mankind received even those opinions and ceremonies they would die for, rather from the fashions of their countries, and the constant practice of those about them, than from any conviction of their reasons. I mention this only to let you see of what moment I think company is to your son in all the parts of his life, and, therefore, how much that one part is to be weighed and provided for, it being of greater force to work upon him than all you can do besides.

Continued on
page 305 Vol. 14.
G. U.

XI. JOHN GREEN AND THE FREE PUBLIC LIBRARY,

WORCESTER, MASS.

John Green, M. D., the founder of the Public Library in his native town, was born in Worcester, Massachusetts, on the 19th of April, 1784. His father was a physician of much eminence in that section of the State, and gave his son, the best education the schools and colleges of the day afforded. He entered Brown University in 1800, and graduated in course in 1804—not so remarkable for scholarship in the Latin and Greek languages and mathematics, as for his love of English literature, and a fondness for the reading and possession of books. While in college he laid the foundation of his private library in the purchase of Chambers' Cyclopædia, in three folio volumes, which caused his father to remark—"His son was going pretty largely into books." In 1808, he commenced his professional practice in Worcester, following the footsteps of his family for three generations, and sustaining the reputation which had attached to his name by an unusually prosperous career until 1850, when he retired from practice on account of ill-health. He received from Harvard College an honorary medical diploma, was Councilor and Censor of the Massachusetts Medical Society, Councilor of the American Antiquarian Society, President of the Worcester District Medical Society, and in 1854, was one of the Vice-Presidents of the United States Medical Association. True to his appreciation of books, wherein the experience of the past is treasured up for the instruction of the present, he was one of the earliest and most efficient friends of the Worcester District Medical Library, which grew up in his connection with it to 3000 volumes. Back possibly to the purchase of the Cyclopædia in his college days, may be traced the germs of a purpose to found a public library—certain it is, that the act did not finally grow out of the necessity of finding more room for a collection which had outgrown the accommodations of an ordinary dwelling-house. Long before he had announced his plan to the public, he made purchases as opportunity offered on a well digested plan, so that his collection gradually developed itself in



John Green

such proportions, that he was satisfied to open its treasures to the public in his lifetime.

In 1855, Dr. Green placed his large miscellaneous library of about five thousand volumes, in the rooms of the Worcester Lyceum and Library Association,* to be used as a consulting and reference library for a term of not less than five years. As this period was about to expire, Dr. Green in November, 1859, made known to the Directors of the Lyceum and to the mayor of the city, his desire to endow a public library, by the donation of these volumes with additions, to the city of Worcester, "in trust for the free use of the citizens and public forever as a library of consultation and reference." The directors and members of the Lyceum and Association entered heartily into his views, and signified to the mayor their desire to transfer to the city their library as the foundation of a circulating library, "provided suitable arrangements and appropriations are made for its reception."

On the 5th of December, 1859, the mayor communicated to the City Council the wishes of Dr. Green, and the Worcester Lyceum and Library Association, whereon resolutions were passed—recognizing "the importance of the subject and the magnitude of the proposed gifts," and authorizing the Committee on Education to consider and report the action necessary in the premises.

On the 27th of December, 1859, Dr. Green, executed a deed of gift to the city of Worcester in its corporate capacity, by which the library owned by him and in possession of the "Worcester Lyceum and Library Association" was granted and conveyed for the free use of the citizens and the public forever, on condition "that the management of the Library, the custody of the books, and the regulations under which they may be used shall be vested in a Board of twelve Directors, two of whom shall be chosen annually, and shall hold their offices six years each," and also on condition that the city shall pay the salary of a competent Librarian to be chosen by the Directors, and shall furnish a suitable library-

*The WORCESTER LYCEUM was formed November 4th, 1829, for the mutual instruction and improvement of its members by means of debates, scientific lectures and books. It was one of the earliest permanent organizations under the Lyceum movement of Josiah Holbrook, commenced in 1826. The first President, was the Rev. Jonathan Going, who presided in the meeting at Columbian Hall, Boston in 1830, out of which originated the American Institute of Instruction.

The *Young Men's Library Association* was instituted in August, 1852, into which was absorbed the "Young Men's Christian Association," formed about the same time, and in 1855, the Young Men's Rhetorical Society, formed in 1849. In 1854, a Natural History Department was organized, to which was transferred the "Worcester Natural History Society in possession of the American Antiquarian Society. In 1855, the Lyceum and Association were united, and by act of the Legislature incorporated under the name of the "Worcester Lyceum and Library Association."

building for the books to be secure against fire, "on a plan to be approved by the Directors, and to be open at all proper hours, for the use of the public, according to the regulations of the Directors."

By an ordinance of the city authorities, passed December 23rd, 1859, a *Free Public Library* was established, and the donations of Dr. Green and the Worcester Lyceum and Library Association, the former consisting of 7,000 volumes, and the latter of 4,500 volumes, were accepted; and at the same time provision was made for the appointment of a Board of Directors, with all the necessary powers for appointing a librarian, and all subordinate officers, and expending any money which may be appropriated for the erection, furniture and repairs of a building, and warming and lighting the same, and for the purchase of books. By an act of the Legislature approved February 2, 1860, the action of the city authorities was approved, and the City Council are authorized to provide for the erection of a suitable building, and to appropriate annually the further sum of five thousand dollars for the increase of the library. A building for the accommodation of the Green Library of Reference, the Free Circulating Library and other kindred institutions was commenced in 1860, on Elm street, and was opened for occupancy in 1862—at a cost for site, building, and equipment of $30,000.

According to the (third) Annual Report of the Directors, submitted January, 1863, there were in January, 1863, in the Free Public Library Building of Worcester, about 20,000 volumes, viz., in the Green Library, 10,000 volumes; in the Circulating Department, 6,077 volumes; in the Worcester District Medical Library, 3,500 volumes; in the Worcester Farmer's Club Library, 500 volumes, besides the Cabinet and Library of the Worcester Natural History Society. To the annual increase of the library by donation, Dr. Green has been the largest contributor. He enjoys the privilege, not always appreciated by the collectors of valuable books, of sharing with his fellow-citizens, the pleasures and advantages to be derived from consulting and reading the oldest and the latest additions to human knowledge and intellectual enjoyment.

The Directors in their Report for 1862, remark:

"The Free Public Library is now a fixed and permanent institution of the city. It has overcome the difficulties and oppositions of its origin and is an incorporated portion of our educational system. Already the number of those availing themselves of its privileges is greater than that of the scholars in our public schools. Nor are these privileges few or slight. The Green Library is one, the possession of which, whether we regard the number or the character of its

books, might justly be a source of congratulation and pride to any community. It is already nearly as large as the Library of Mr. Parker, presented to the city of Boston, and much better adapted to the varied wants of a community like Worcester. It contains nearly twice the number of volumes of the Dowse Library of Cambridge, whose consecration to the public use was deemed worthy a public celebration, and an oration by Mr. Everett.

In its Encyclopedias, Dictionaries and Gazetteers, works of general reference; in its historical department, European and American; in its illustrated books of art and architecture; in its collection of works on Natural Science, choice and costly; in its books of Geography and travels and in all its miscellaneous departments, the Green Library is rich and ample. It is a treasury of knowledge nobly and generously provided for the intellectual wants of our city. And it is peculiarly fortunate and proper that in this city, distinguished for the mechanical genius and enterprise of its citizens, for their independence of thought and restless desire for progress, in matters both physical and intellectual, there should be one public place consecrated to the diffusion of knowledge, free and universal, within whose walls the jar of political and religious discord may never come, all whose influences shall be softening and elevating, improving the character of the present generation and moulding the next for something still higher and better."

Among the Regulations adopted by the Directors for the government of the Library are the following:—

All persons resident in the city of Worcester, *fifteen* years old and upwards, shall be entitled to the use of the Circulating Department of the Free Public Library, on subscribing the following agreement:

I hereby certify that I am a resident of the city of Worcester, and in consideration of the right to use the Free Public Library, agree to comply with the regulations that may be provided for its government.

One book may be taken at a time, and kept two weeks; but recent additions may be limited to a circulation of one week, at the discretion of the Library Committee.

A fine of two cents a day shall be assessed on every book kept over time, payable on its return. No pen or pencil marks shall be made in books. Persons taking books shall be held responsible for their loss or injury; and when a set is broken by a loss of one, this responsibility extends to the whole set. Should it be necessary to send for a book kept beyond the time allowed, the expense shall be paid by the person keeping it.

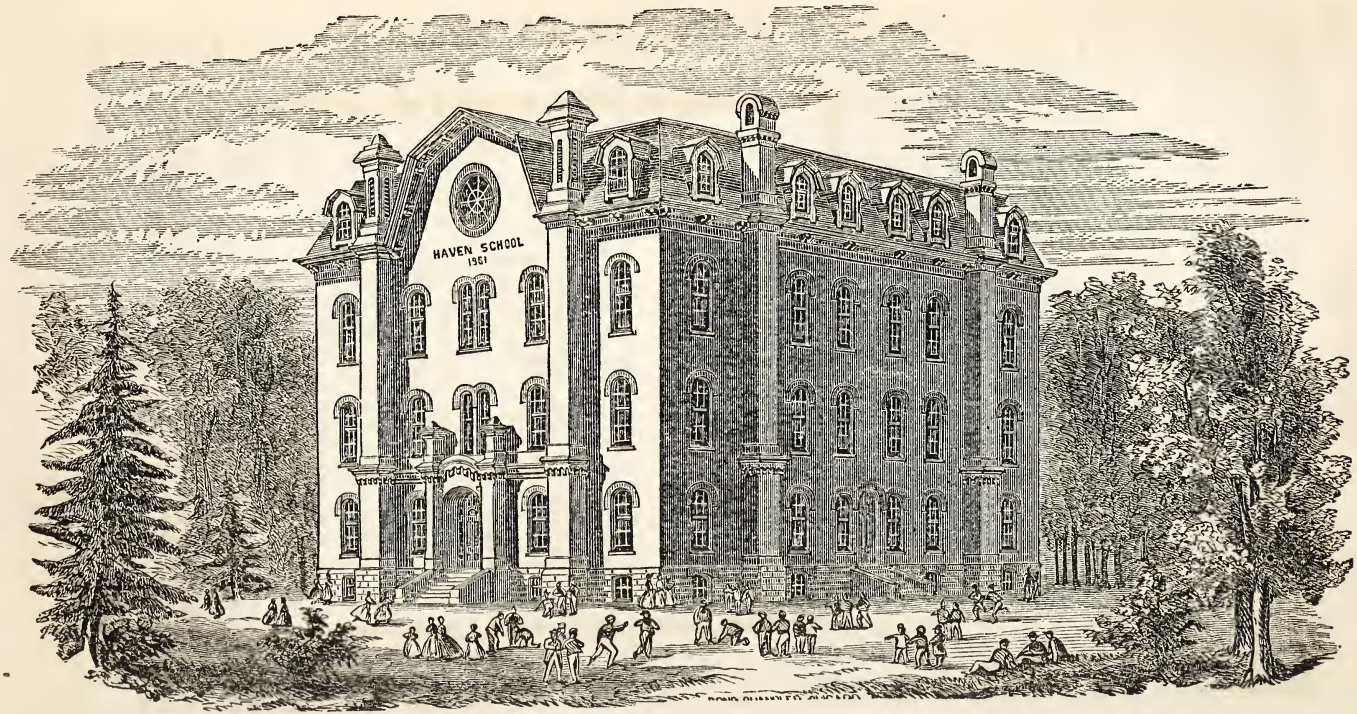
The Library will be open from 9, A. M., to 1, P. M.; from 2 to 5, P. M., and from 6½ to 8, P. M. On Saturday, it will be open until 9, P. M.

The Green Library shall be open daily to the public, during the same hours prescribed for the Circulating Department.

The public may take down freely any of the books of reference on the North side of the lower floor. Other books will be promptly delivered by the Librarian, on verbal application, and must be returned to him again, before leaving the room.

Persons may ask for as many books as they require, for purposes of consultation and reading, and are entitled to all proper facilities for their use. *Provided*, that in case of rare and costly works, the Librarian may adopt such additional restrictions as prove necessary.

The library is under the charge of Mr. Z. Baker, as librarian, with two assistants.


HAVEN SCHOOL
1961

X. SCHOOL ARCHITECTURE.

Plans of Haven School-Building, Chicago, Illinois.

The Haven School-building, named after Luther Haven, the President of the Board of Education at the time, and who had been an active member of the same since 1851, is located on Wabash Avenue, south of Twelfth Street. The lot has a frontage of 150 feet. The buiding is three stories high, besides a basement and an attic. The plans here shown are of the principal story and the attic, the latter of which is 14 feet high in the clear, and contains a hall 66 feet by 38 feet 8 inches, for general exercises of the school, with closets for apparatus, teachers'

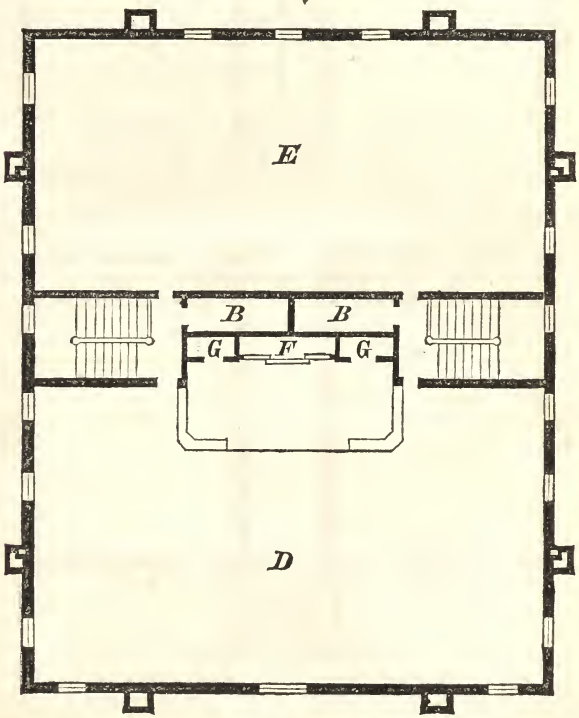


Figure 2.—Fourth Floor.

B.—Wardrobes.
D.—Hall.
E.—Gymnasium.
F.—Closet for Apparatus.
G.—Teachers' Closets.

closets, and wardrobes attached; and a Gymnasium in which the female pupils of the school may exercise, in inclement weather. Owing to the peculiar con-

struction of the roof, this attic story is quite as serviceable for the purpose for which it was designed, as would have been either of the full stories, and it cost much less. The basement is mainly divided into four large rooms, with corridors, and stairways; one of the rooms being used for fuel, and the balance as a place of recreation for the boys, in foul weather. The principal or ground floor, (one of the two shown in the annexed engraving, Fig. 2.,) has four school-rooms, each having a wardrobe and teacher's closet attached; spacious corridors, with entrances on each side of the house for pupils, and a principal entrance in

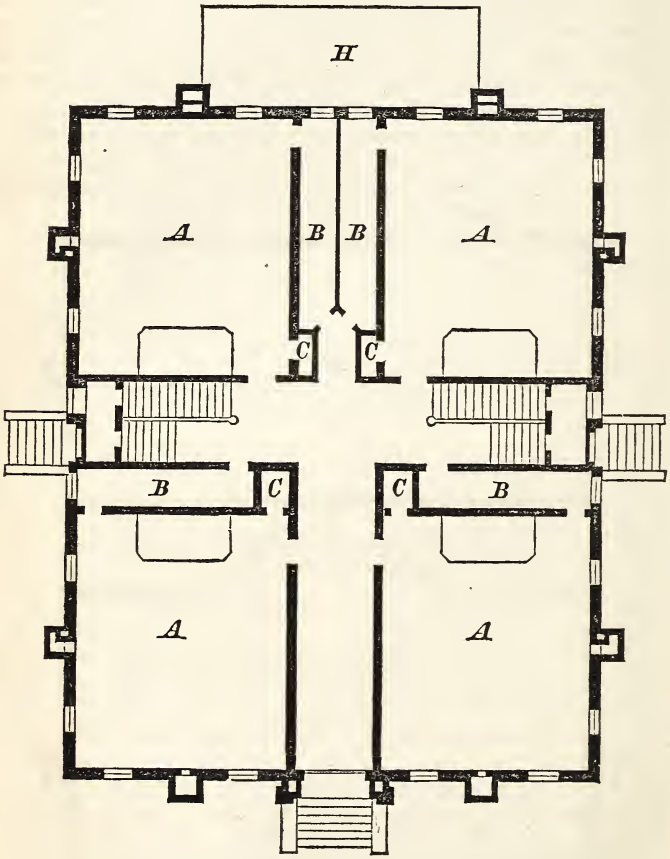


Figure 3.—First Floor.

A.—School rooms.
B.—Wardrobes.
C.—Teacher's Closets.
H.—Boiler House.

front. The side doors do not open directly into the corridors, but into vestibules, from which, other doors open to the corridors and also to the stairways leading to the basement. The second and third floors only differ from the first in having windows, in place of the outside doors and vestibules of the first floor; and the second floor has a reception or Principal's retiring room, about 10 by 20 feet, cut off from that part of the corridor towards the front of the house.

By an examination of the plans, it will be seen that the pupils in passing to and from the school-rooms, will generally pass through the wardrobes. Each of these rooms are wainscoted from the floor up about 2½ feet, and the corridors and wardrobes from 5 to 7 feet, with boards, neatly grained and varnished, (as is all the interior wood-work,) and above these on each side of the rooms are blackboards.

The rooms are ventilated through the large ventilating shafts or buttresses in the exterior walls. The building is 68 by 86 feet on the ground, and each school-room 27 by 33 feet, and 13 feet high. The exterior (Fig. 1,) is in a plain Americo-Italian style of architecture; is entirely devoid of any thing like ornamentation, save in its bold projecting buttresses which form the ventilating and chimney shafts before mentioned; its deeply recessed doorway in front, with massive buttresses on each side; and its elegant *Mansard* roof, the steep sloping sides of which, covered with slate, and pierced with Dormer windows, gives it altogether a unique and pleasing effect. Externally, the finish of the basement to the principal floor is stone. Above this the building is faced with red pressed brick, neatly pointed, and has stone-dressings to doors, windows, buttresses, etc.

The building is warmed by a boiler located in a room at the rear of the building, and covered with a lean-to roof rising no higher than the basement.

The boiler is of the tubular form, twelve feet long by forty-two inches in diameter, of quarter inch best American iron, steam dome 24 by 20 inches, with forty-one three inch flues, grate bars four feet by four feet, boiler set in double eight inch walls with full cast iron front, braced with 6/8 inch bolts through each way, with cast iron braces outside and inside the walls.

The whole amount of pipe in Haven School is 13,294 feet, of which mains and returns contain 3,102 feet, and ¾ inch coil pipes, 10,192 feet. In each school-room there is one large coil of 530 feet, of ¾ inch pipe and one small coil of 50 feet, making 145 square feet of radiating surface in the coils.

There is an average amount in addition to the above of sixteen square feet in the mains and returns in each room, which makes the total amount of radiating surface in each room 161 square feet, which gives one square foot of radiating surface to 75 cubic feet of air. This we think may be set down as a rule for low pressure heating, when the pressure is not to exceed from 5 to 15 lbs.

In the corridor, there are four coils containing 1,500 feet of ¾ inch pipe; in the Hall there are two coils containing 1,000 feet ¾ inch pipe; in the Gymnasium there are two coils containing 792 feet, and in the Reception Room one coil containing 100 feet ¾ inch pipe.

In the dedicatory exercises of this house, the President of the Board, Mr. Haven, remarked:—

My acquaintance with the public schools of Chicago, commenced in the winter of 1851—twelve years since. From that time to this, I have occupied a seat in this Board. In 1851, there were but four public school buildings in the city. Those buildings accommodated less than 1,700 pupils. The Franklin and the Washington, one on the north and the other on the west side of the river, were erected that year, each with capacity to accommodate 340 pupils. In 1856, the Moseley was erected on the south side, and the Ogden on the north, accommodating 693 pupils each. In 1857, two more of the same capacity as the last were erected on the west side—the Brown and the Foster. In 1858, the Newberry was erected, seating 1,260 pupils, and in 1859, the Skinner, of the same size and character. The new and elegant school building on Wabash

Avenue was completed during the past year, with a capacity for 756 pupils. In addition to this building, five branches have been built, making an aggregate number of seats provided during the year just closed, of 2,420, nearly double the number furnished in any one preceding year. In 1857, the High School building was erected, with a capacity for 360 pupils; making a total number of seats provided for the children of this city, 10,995. In 1851, less than 1,700 pupils could be accommodated with seats in our schools—to-day, more than 11,000! It is proper here to say, that the buildings provided during this time have been of the most substantial character, so that now few cities can boast of more ample accommodations for those due at the school-rooms, and few if any can equal us in the beauty of our houses, the completeness of their plans and furnishing, or in the thoroughness of their construction. These buildings have cost the city,) a little over $300,000.

W. H. Wells, *Superintendent of Public Schools*, spoke substantially as follows:

Notwithstanding Chicago was somewhat distinguished for the frequency and enthusiasm of its conventions and celebrations, this was the first instance in which the friends of education had come together for the dedication of a school building. He alluded to the rapid progress of the public schools. No other city in the Union has so early in its history manifested such a degree of liberality in the establishment of a High School for the education of both sexes. In Boston, a public Latin School was instituted as early as the seventeenth century, and an English High School more than forty years ago; but these schools provided for the instruction of boys only, and the arrangements for a Girls' High School were not perfected till within the last ten years. The Central High School of Philadelphia was organized about a quarter of a century ago, and during the first ten years of its existence was without a rival in the completeness of its appointments and the extent of its course of instruction. But it receives only boys, and it was not till after the opening of the Chicago High School that Philadelphia established a High School for girls. The Free Academy of New York was organized in 1849. Like the Philadelphia High School it embraces a course of instruction that is equal to an ordinary college course, and has the power of conferring the usual college degrees; but it is for boys only, and no special provision has yet been made in the great metropolis of the country for the higher education of girls.

He then alluded to the advantages of a new city establishing a system of public instruction. We can profit by all the successes and failures of those who have gone before us. In an old city, defective systems once established, can not easily be rooted up. In a new city, we have no such prejudices to contend with. In olden cities, the question whether the sexes should be educated together has already been discussed for more than a score of years, and it will probably require another score of years to dispose of it. In Chicago we have omitted all discussion on this point, and demonstrated by actual experiment, to the satisfaction of all parties, that the sexes are best educated together.

The speaker then alluded particularly to the efforts that have been made to improve the character of the Primary Schools. More than half of all our public instruction is given in the Primary Schools, and a large portion of the children do not remain in school long enough to pass into the higher departments at all. He had devoted much the larger portion of his time to the primary grades, and the Board of Education had introduced many important improvements in

these schools. Instead of being required to sit a large part of the day with folded arms, in a constant struggle against all the laws of their being, the small children are now all provided with slates and pencils, and during a considerable portion of the day combine instruction with entertainment, by copying the words or figures of their lessons, and drawing a variety of simple objects from cards, or blackboard sketches, or pictures in books.

Another feature of the system, which the superintendent regarded of vital importance, is the oral course. We have not, said he, imitated the example of those who make object teaching the basis of their system of primary instruction, but we have introduced in both the Grammar and the Primary divisions a systematic and graded course of oral lessons, interspersed in such a manner as to afford an agreeable variety and healthful relaxation, without retarding the progress of the pupils in other branches. We have labored particularly to give such shape and direction to the oral exercises as to remove, in some degree at least, the common objection that school instruction is not sufficiently practical.

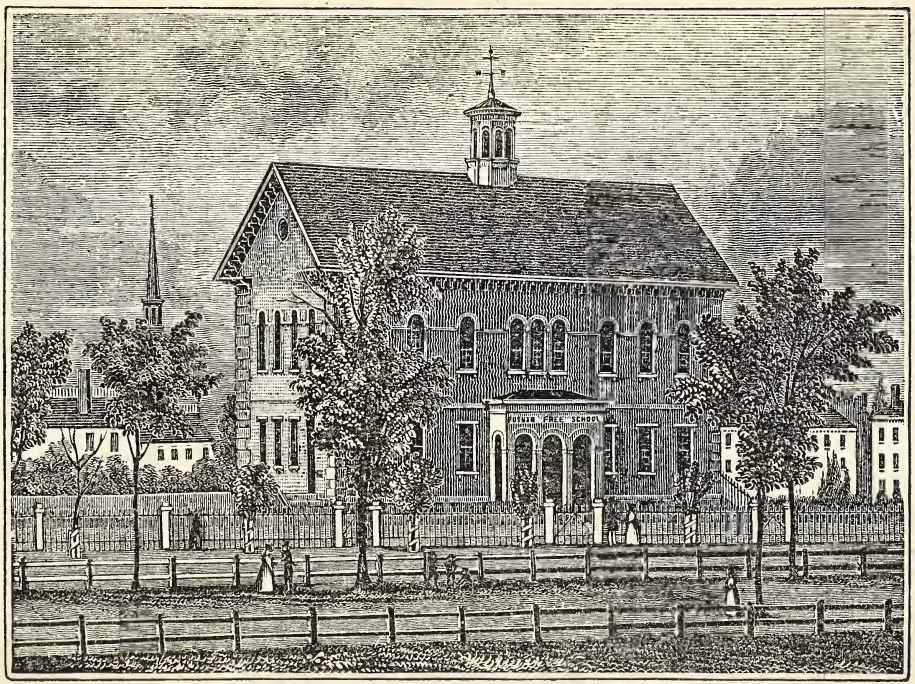
The following is a summary of the Statistics of Attendance, Teachers, and expense of supporting Public Schools, during the year ending December 31, 1862:

Whole number of different pupils enrolled in 1862, was		17,521
Number of pupils under six years of age enrolled,		2,063
Number of pupils over fifteen,		964
Number of colored children,		212
Whole number of different pupils admitted and readmitted,		21,730
Whole number of different pupils belonging to the schools *through the year*,		2,093
Whole number of different pupils belonged to the schools less than three months,		5,539
Whole number of Teachers, viz., 23 males, and 166 females,		189
Salaries of Teachers and Superintendent,	$75,326 18	
Labor and supplies, including fuel, repairs, care of buildings, office expenses, printing, etc.,	16,217 46	
Rent of school buildings, furniture, and lots belonging to city, estimated,	16,706 46	
Rent of school lots belonging to the School Fund, estimated,	3,025 00	
Other rents,	835 22	
Amount,	$112,110 32	

The whole cost of instruction the last year, was $112,110.32. This amount divided by 8,962, the average number of pupils belonging to all the schools, including the High School, shows the expense per scholar to have been $12.51.

The expense of sustaining the High School during the last year, was $12,370.53. This amount divided by 299, the average number of pupils belonging to the school, shows the cost per pupil to have been $41.37.

The whole cost of sustaining the District Schools (Grammar and Primary,) during the last year, including estimated rent of buildings and grounds, was $99,739.79. This sum, divided by 8,663, the average number belonging to the schools, shows the expense per scholar to have been $11.51.



PUTNAM FREE SCHOOL, NEWBURYPORT, MASS.

Plans and Description of the Putnam Free School-House, Newburyport, Mass.

We are indebted to W. H. Wells, Esq., the gentleman who has been selected as Principal of the Putnam Free School, and to whom the work of organizing this important institution has been committed, for the following plans and description.

The Putnam Free School was founded by Mr. Oliver Putnam, a native of Newbury. It has a permanent fund of fifty thousand dollars, besides the amount invested in the school-house and its appurtenances.

The number of pupils to be admitted at the opening of the school (April, 1848,) is limited by the Trustees to 80. No pupil can be received under twelve years of age, nor for less time than one year.

The object of the Institution is to lead pupils through an extended course of English study. It is open to students from any portion of the country, who are prepared to meet the requirements for admission. No charge is made for tuition.

This building is situated on High street, directly opposite the Common or Mall. It is constructed of brick, with corners, door-sills, underpinning, steps, etc., of freestone. It is two stories in height, exclusive of a basement story, 85½ feet in length, and 52½ in breadth.

The upper story is divided into two principal school-rooms, each 49½ feet by 40½. There is also a small room in this story for the use of the Principal. The lower story contains a hall for lectures and other general exercises, and four recitation rooms. The hall is 44 feet by 48½. Two of the recitation rooms are 14 feet by 17, and two are 11 by 20.

Each of the principal school-rooms is furnished with 64 single seats and desks, besides recitation chairs, settees, etc. The desks are made of cherry; and both the desks and the chairs are supported by iron castings, screwed firmly to the floor. In form and construction, they are similar to Kimball's "Improved School Chairs and Desks."

The central aisles are two feet and eight inches in width; the side aisles, four feet and four inches; and the remaining aisles, two feet.

The building is warmed by two furnaces. It is ventilated by six flues from the hall on the lower floor, six from each of the school-rooms on the second floor, and one from each of the recitation rooms. Each of these flues has two registers; one near the floor, and the other near the ceiling. The two principal school-rooms are furnished with double windows.

The institution is provided with ample play-grounds and garden plots, back of the building and at the ends. It has also a bell weighing 340 lbs.

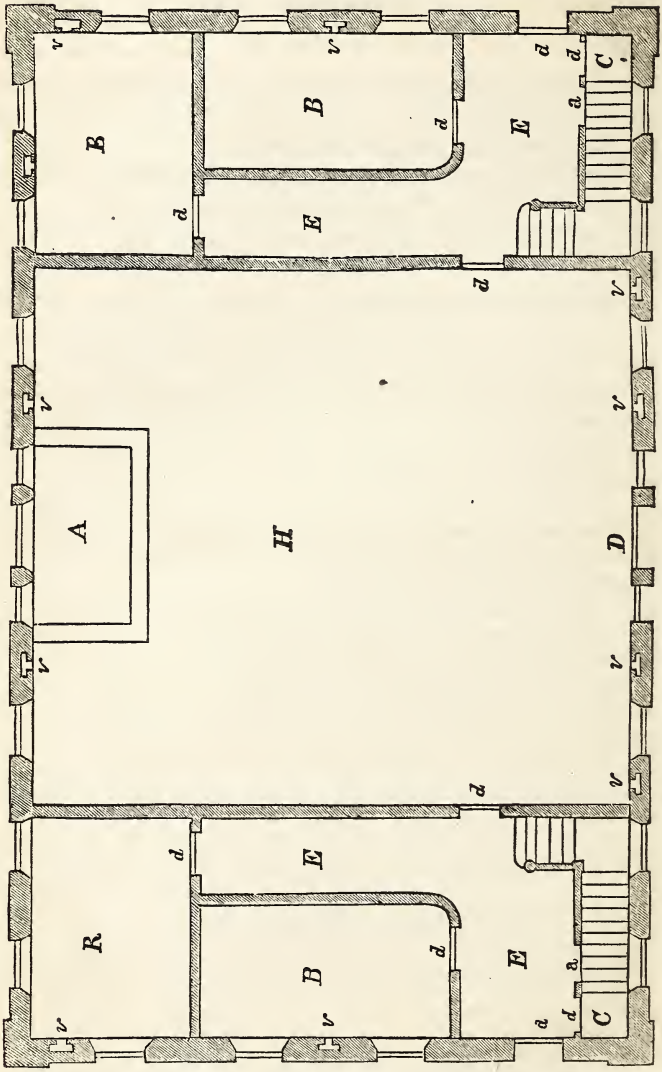
The first appropriation of the Trustees for the purchase of apparatus, is one thousand dollars. Other appropriations will probably be made, as the wants of the school may require. In addition to the apparatus procured by the Trustees, the institution is to have the use of an achromatic telescope, which will cost between three and four hundred dollars.

The cost of the building and ground, with the various appurtenances, exclusive of apparatus, has amounted to twenty-six thousand dollars.

The accompanying plans give a correct representation of the arrangements on the two principal floors.

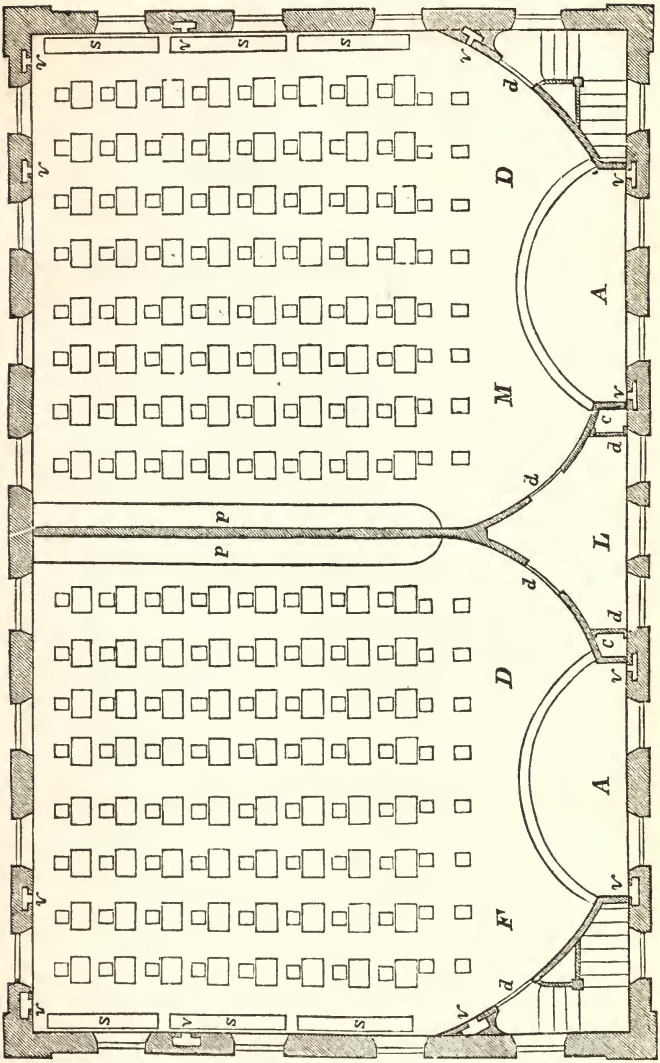
The building was erected after designs and specifications by Mr. Bryant, Architect, Boston.

PUTNAM FREE SCHOOL-HOUSE.—LOWER STORY

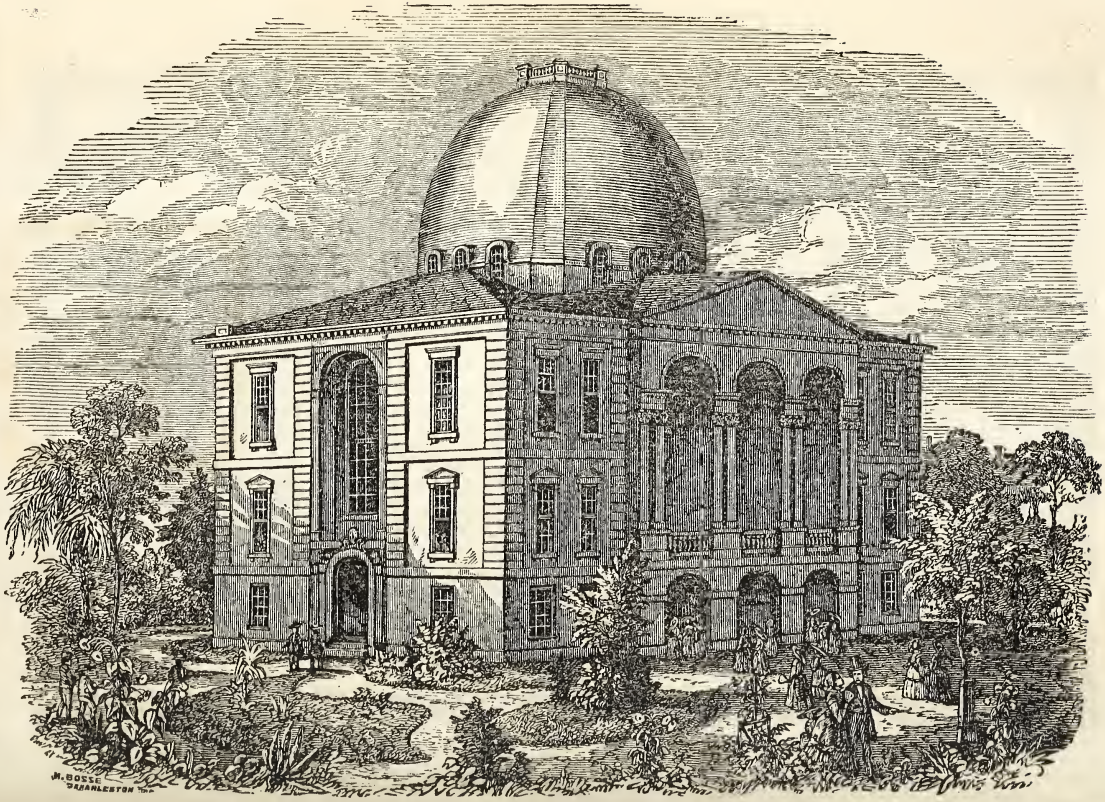


H—Hall for lectures and other general exercises, 44 feet by 48½. A—Raised platform for desk. D—Front door. (The portico in front does not appear in the plate.) B, B—Recitation rooms, 11 feet by 20. R, R—Recitation rooms, 14 feet by 17. E, E, E, E—Entries. C, C—Wash closets, under the stairs. a, a—Doors leading to the basement story. d, d, d, d, d, d, d, d, d, d—Doors. v, v, v, v, v, v, v, v, v, v.—Ventilating flues.

PUTNAM FREE SCHOOL-HOUSE.—UPPER STORY.



M, D—Room for Male Department. F, D—Room for Female Department A, A—Raised platforms for teachers' desks. L—Principal's room. C, C—Closets. p, p—Raised platforms under the black-boards. s, s, s, s, s, s—Settees d, d, d, d, d, d—Doors. v, v, v, v, v, v, v, v, v, v, v, v—Ventilating flues


M. BOSSE
CHARLESTON

II. Girls' High and Normal School, at Charleston, S. Carolina.

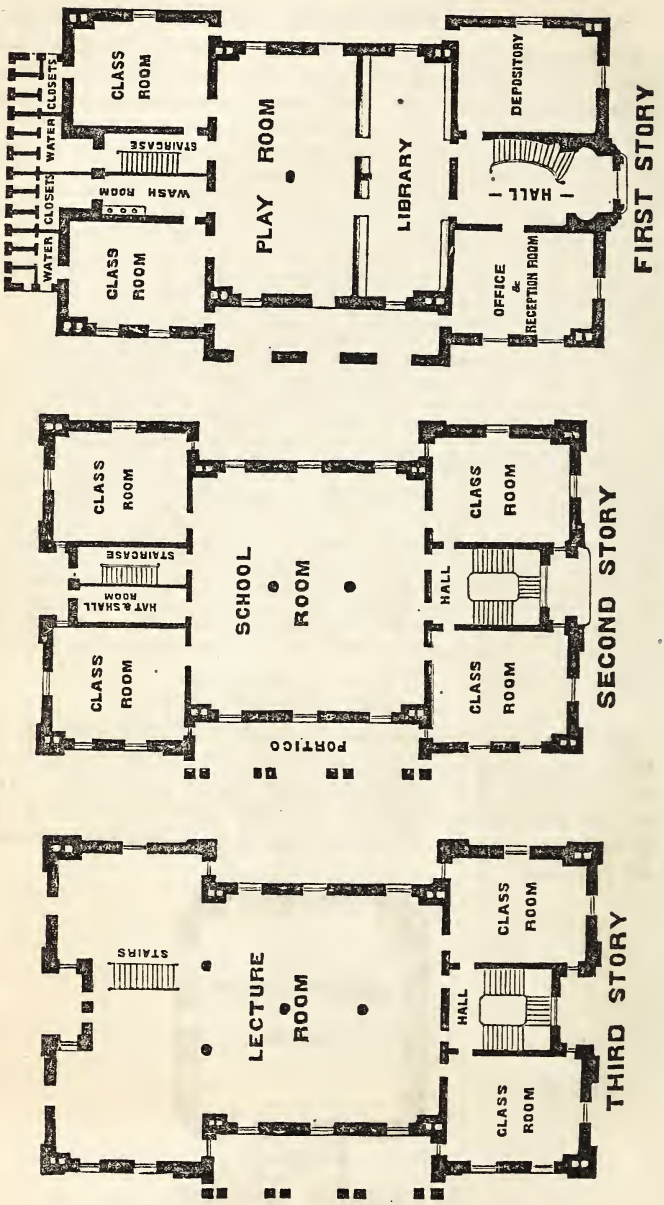
The Public High and Normal School for Girls in the City of Charleston, South Carolina, was established in 1858 and opened in the new building erected for its accommodation in 1860. The Commissioners of Free Schools, of which C. S. Memminger was chairman, thus set forth the purpose of this institution.

The purpose of this School is two-fold. First, it proposes to add to the advantages of primary instruction given by the various Public Schools of lower grade, all the advantages of higher education which are offered by the best schools for girls. From the great advantages which a large public school, with ample resources, can always command over private schools, it is safe to say that in all the elements necessary to insure success, this school must be without a rival in our community, in furnishing that education which cultivated parents desire for their daughters. Its second purpose is the education of young ladies for the profession of teachers. It is proposed to form into a special class all those whose purpose it is to devote themselves to this honorable work, and whose qualifications admit of their receiving the proper course of instruction, and to devote as much time and labor to such exercises as will be of value to them in their future duties. These exercises will be such as would be of high value to any pupils sufficiently advanced to engage in them—to those who propose to teach they are indispensable. The power of teaching well comes not by intuition; the *best* kind of education would probably give it to most men, but most of even the well-educated men and women are without it, though to no person of average ability is its acquisition impossible. It comes, however, only as other arts come; by special training, by well-directed efforts, and by patient labor. By no means a secondary purpose in importance is that of furnishing to our city and State a corps of well-educated and intelligent young ladies, who will train, in their turn, the minds and hearts of the thousands who will be committed to their charge. The School is supplied with teachers of tried ability and large reputation, in all its departments. The several congressional districts of the State have a right to send fifteen pupils each to this school, to enter the Normal department.

I. BUILDING AND FURNITURE.

The building erected for the accomodation of this school, of which we furnish illustrations, has one School Room on the second floor 40 by 40 feet, with four class-rooms, each 18 by 23 feet; and a large Lecture Room on the third floor 40 by 63 feet, with two class-rooms, each 18 by 28 feet; and a Play Room 25 by 40 feet and Library on the first floor, and a room for the Commissioners on the Dome floor.




CLASS ROOM
WATER CLOSETS
WATER CLOSETS
STAIRCASE
WASH ROOM
CLASS ROOM
PLAY ROOM
LIBRARY
DEPOSITORY
HALL
OFFICE & RECEPTION ROOM
FIRST STORY
CLASS ROOM
STAIRCASE
HAT & SHAWL ROOM
CLASS ROOM
SCHOOL ROOM
HALL
CLASS ROOM
CLASS ROOM
PORTICO
SECOND STORY
STAIRS
LECTURE ROOM
HALL
CLASS ROOM
CLASS ROOM
THIRD STORY

HUGHES' CITY HIGH SCHOOL CINCINNATI.



Fig. 1.—PERSPECTIVE.

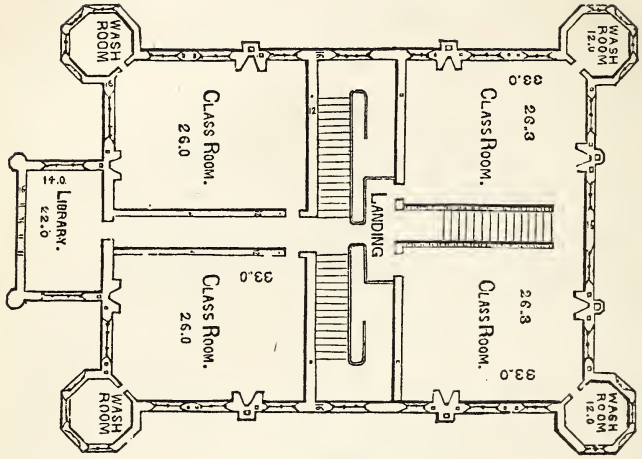


Fig. 2.—Basement.

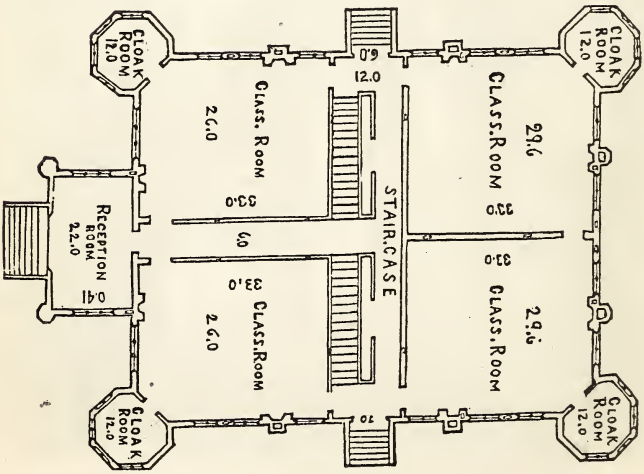


Fig. 3.—First Floor.

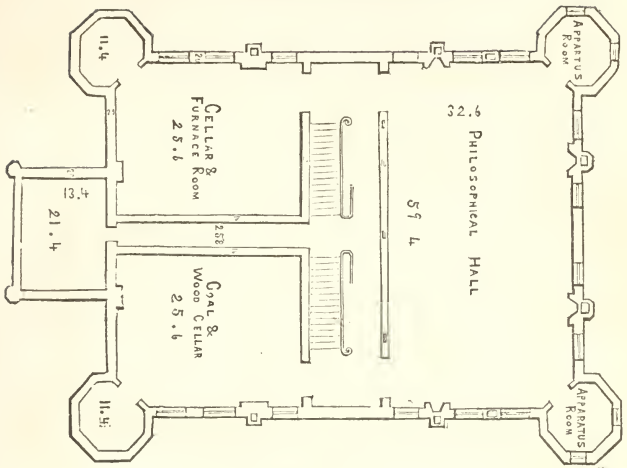


Fig. 4.—Second Floor.

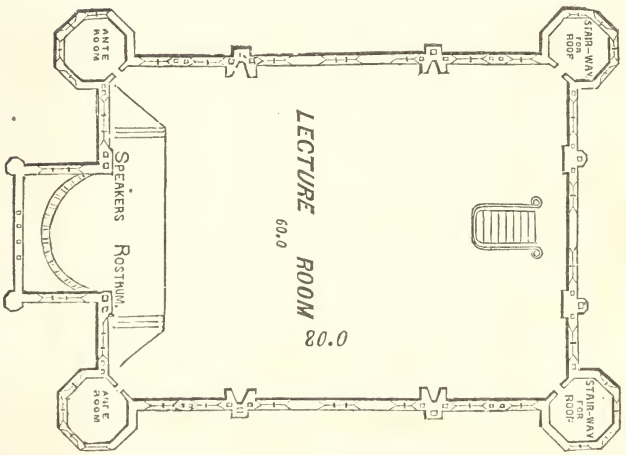


Fig. 5.—Third Floor.

XIII. AMERICAN TEXT-BOOKS.

[* *Book not in the library of the Editor.* ** *The Editor has a duplicate copy for exchange.*]

D.

DABOLL, NATHAN,
The Schoolmaster's Assistant. New London, 1st edition, 1800. 2nd edition, 1800. 3rd edition, 1802. 1st revised edition, 1812. 8th edition, 1814. 11th edition, 1815. Stereotyped edition, 1815 '16 '20 ('21 '25.) Hartford 5th edition, 1806. Norwich, 1818 '19. Albany, 1821 '24.**
Same, edited by S. Greene. Albany, 1825. N. York, 1825, '26. Ithaca, 1827. New London, 1828 '33.
The Practical Navigator. New London, 1820.*
DACIER, MADAME,
Plato's Phædo. Translated. New York, 1833.*
DAGG, J. L.,
Elements of Moral Science. New York.*
DAGGETT, HERMAN,
The American Reader. Pough. 2nd edition, 1812. 25th edition, 1841.
DAHLSTRÖM, J. A.,
Elementarkurs i Latinska Språket, II. Lärobok. Stockholm, 1850.
Ellendt's Latinsk Grammatika, Stockholm, 1852.
DALE, HENRY,
Thucydides' History of Pelop. War. Literal translation. New York, 1856.*
DALE, W. A. T.,
An English Grammar. Albany, 1st edition, 1820.*
D'ALFONCE, E., JR.,
Instruction in Gymnastics. New York.*
DALTON, JOHN,
Elements of English Grammar. London, 1801.
DALTON, J. C., JR.,
Treatise on Human Physiology. Philadelphia.*
DALTON, J. S.,
Chemistry. Edited by T. Griffith. New York 1843.*
DALTON, MATTHEW R.,
Elem. Treat. on Conic Sections, &c. N. Haven, '24.*
DALZELL, ANDREW,
Collectanea Græca Majora, Vol. I. Boston, 4th edition, 1837. (Philadelphia, 1847.)
Do., do. Vol. II. Cambridge, 2nd ed., 1811. 4th ed., revised by J. S. Popkin, 1824.
Prose Selections. Edited by C. S. Wheeler. Phila., '47.*
Collectanea Græca Minora. Edinburgh, 6th edition, 1806. Cambridge, 1st edition, (*Anon.*,) 1804. 3rd edition, 1813 (6th edition, 1826. New York, Phila., 1858.) Boston, 1825.
DANA, JAMES D.,
Manual of Mineralogy. New Haven, 1st edition, '48.*
System of Mineralogy. New Haven, 1837. N. York, 1850. 4th ed. 1854. 5th edition, revised, 1854.*
DANA, JAMES FREEMAN,
Epitome of Chymical Philosophy. Concord, 1825.*
DANA, JOSEPH,
Lessons in Reading and Speaking. Boston, 1792.
Questiones Grammaticæ, or Grammatical Exercises. Boston, 1815.
Liber Primus, or First Book of Latin Exercises. (Edited by Everett,) Boston, 3rd edition, 1821. 5th edition, 1827.
Same, edited by C. K. Dillaway. Boston, 20th edition, 1852. (Philadelphia, 1856.)
DANA, J. F., & S. L.,
Mineralogy and Geology of Boston. Boston, 1818.
DANDO, JOSEPH,
Complete and Infallible System of Book-keeping. Philadelphia, 1842.*
DANIELL, J. F.,
Elements of Meteorology. 2 vols. London, 1855.
DANIEL, J. C.,
Cousin's Philosophy of the Beautiful. N. York, '49.*
Chemical Philosophy. Edited by J. Renwick, (Illustrations of Natural Philosophy.) New York, 1853.
D'ANVILLE, J. B. B.,
Compendium of Ancient Geography. 2 vols. New York, 1st edition, 1814.
DARBY, JOHN,
Elementary Botany. New York.*
Text-Book of Botany. New York.*
Manual of Botany of the Southern States. (Macon, Ga., 1841.) New York, 1855, (1855,) '59.*
School Chemistry. New York.*
DARBY, W.,
Ewing's Geography. New York. 1st edition, 1820.
Mnemonica, or Tablet of Memory. Baltimore, 1829.*
DARBY, W., & T. DWIGHT, JR.,
Gazetteer of the United States. Philadelphia.*
DARLINGTON, W.,
Agricultural Botany. Philadelphia, 1847.*
Agricultural Chemistry. Phila., 1847.*
Flora Cestricæ, and Companion for Young Botanists. Philadelphia, 3rd edition, 1853.*
DAVENPORT, BISHOP,
English Grammar, simplified. Wilmington, 1st edition, 1830.
History of the United States. Philadelphia, 1831, '34. Same, new edition, by J. J. Anderson. Phila., 1852.
DAVENPORT, R. A.,
Gazetteer of the United States, &c. Philadelphia.*
DAVENPORT & COMELATI,
Italian and English Dictionary. See *Baretti*.
DAVIE, ——,
Geography and Atlas.*
DAVIDSON, JAMES,
Translation of Virgil. Edited by T. A. Buckley. New York.*
Translation of Virgil, with Latin Text. 2 vols. N. York, 1823.*
Easy and Practical Introduction to the Latin Tongue. Philadelphia, 1793.
Latin Grammar. Revised by H. Maguire. Baltimore, 1827.
Arithmetic.*
DAVIES, BENJAMIN,
New System of Modern Geography. Philadelphia, 1st edition, 1805.
Robinson's Easy Grammar of History. Philadelphia, 4th edition, 1819.
DAVIES, CHARLES,
First Lessons in Arithmetic. Hartford, 1840. Philadelphia, 1842, '44. New York, 1846. 1850.**
Primary Table Book. New York, 1848.*
Arithmetical Table Book. New York, 1848.**
Primary Arithmetic. New York, 1862.**
Primary Arithmetic and Table Book. New York, '58, (1855.)
Intellectual Arithmetic. New York, 1858, '62.**
Common School Arithmetic. Hartford, 1834.*
Mental and Practical Arithmetic. Hartford, 1838, '39, '40.**
Key to do. Hartford, 1840.**
Arithmetic for Academies and Schools. Hartford, '41. Philadelphia, 1841, '43, no date. New York, 1846. Improved edition, 1850.
Key to do. New York, 1855.
Key to do., with additional Examples. New York, 1845.**
University Arithmetic. New York, 1st edition, 1846, 1847, '50, ('55.)**
Key to do. New York.*
Elements of Written Arithmetic. New York.*
Grammar of Arithmetic. New York, 1st edition, 1850.**
New Primary Arithmetic. New York, 1863.*
New Intellectual Arithmetic New York, 1862.*

New Practical Arithmetic. New York, (1862.) '63.
School Arithmetic, Analytical and Practical. New York. Revised edition, 1855.
Key to do. New York.*
New University Arithmetic. New York 1855.*
Key to do. New York 1855.*
First Lessons in Algebra. Philadelphia, 1841.
Elementary Algebra. Philadelphia, 1843. New York, 1844, '50, '53.**
Key to do. New York, 1844, '48.*
New Elementary Algebra. New York.*
Key to do. New York.*
University Algebra. New York.*
Key to do. New York.*
Bourdon's Elements of Algebra. Philadelphia, 1842. New York, 1849.
Key to do. New York, 1855.*
First Lessons in Geometry. (Hartford, 1839.) New York, 1840.
Elements of Descriptive Geometry. Philadelphia, (1827,) '44. New York, 1844, '48.
Elements of Analytical Geometry. New York, 1836.
Elementary Geometry and Trigonometry. N. York.*
Legendre's Geometry and Trigonometry. Translated by Brewster. New York, 4th edition, 1834.
Elements of Analytical Geometry, and of Differential and Integral Calculus. New York.*
Elements of the Differential and Integral Calculus. New York, 1836, '60. Phila., improved ed., '43.
Elements of Surveying. N. York, 1835. 4th ed., 1838.
Elements of Surveying and Navigation. New York.*
Practical Mathematics for Practical Men. N. York.*
Practical Mathematics with Drawing and Mensuration. New York, 1852.*
Logic of Mathematics. New York, 1850.
Mathematical Chart. New York.*
Shades, Shadows, and Linear Perspective. New York, 1844, '48, '55.*

DAVIES, CHARLES, & W. G. PECK,
Mathematical Dictionary and Cyclopedia of Mathematical Science. New York, (1855,) '59.

DAVIS, D., JR.,
Manual of Magnetism and Electro-Magnetism. Bost.*

DAVIS, EMERSON,
Franklin Intellectual Arithmetic. Springfield, 1832.*

DAVIS, PARDON,
Modern Practical English Grammar. Philadelphia, '45.
An Epitome of English Grammar. Philadelphia, 1st edition, 1818.*
Principal of Government of the United States.*

DAVIS, SETH,
Pupil's Arithmetic. Boston, 1826, '28.*

DAVIS, ——,
Walker's Dictionary of the Eng. Language. N. Y.*

DAVY, SIR HUMPHREY,
Elements of Chemical Philosophy. Phila., 1812.*
Conversations on Chemistry. 1819.*

DAVY, J.
Chemistry and Familiar Science. Albany.*

DAWES, RICHARD,
Miscellanea Critica. Ed. by T. Burgess. Oxford, '81.

DAWSON, JOHN,
Lexicon Novi Testamenti. London, 11th ed., 1797.

DAWSON, W., (Writing Master.)
Youth's Entertaining Amusement. Phila., 1754.*

DAY, GEORGE E.,
Physiological Chemistry. See *C. Lehman.*

DAY, HENRY N.,
The Art of Elocution. New Haven, 1st edition, 1844.
Elements of the Art of Rhetoric. New York, (1853.) 4th edition, 1854. (Phila.)

DAY, H. W.,
The Vocal School; Elements of Vocal Music. Boston, 1841.*

DAY, JEREMIAH,
Introduction to Algebra. New Haven, 1st edition, 1814. 2nd ed., 1820. 4th ed., 1827. 6th ed., 1831. 32nd ed., 1838. 34th ed., 1839. 41st ed., 1841. 69th ed., 1851. New edition, 1859.**
Key to do. New York 1850. New Haven.*
Elements of Algebra. (Same, abridged by J. B. Thompson.) New Haven, 1843. 5th edtion, 1844. 6th ed., 1845. 12th ed., 1849.
Treatise on Plane Trigonometry. New Haven, 1815. New York, 2nd edition, 1824.*
Same, edited by J. B. Thompson. New York, 1852.*
Treatise on Mensuration. New Haven.*
Treatise on Navigation and Surveying. New Haven.*
Mathematics, embracing the last three Treatises. New Haven. New York, 1831, '51.*
Elements of Surveying. Edited by J. B. Thompson. New York, 1853.*

DAY, J. Q.,
Outlines of Physical Geography. Boston.*

DAY, PARSONS E.,
Elementary Principles of English Grammar. Ithaca, 2nd edition, 1844.
District School Grammar. Ithaca.*
" " Speaker. Ithaca.*

DAY, THOMAS,
Sanford and Merton, in French. By Berquin. Philadelphia, 1848.*

DAY, WILLIAM,
How to Stop and when to Stop—Punctuation. London, 3rd edition, 1847.

DE BOISJERMAIN, L.,
Cours de Langue Latin, (Cæsar's Commentaries.) Paris, 1787.

DE FIVAS, ALAIN,
New Elementary French Reader. New York, 1850.
Advanced French Reader. Translated by Jewett. New York. 1850.*
Classic French Reader. Ed. by J. L. Jewett. N. Y., '50

DE GENLIS, MADAME,
Le Liége de la Rochelle. New York.*

DE HENSCH, HENRY,
Practical French Grammar. New York, 1796.*

DE JEAN, ——,
The Indian Book; (Anichinabek Amisinahi-Kaniwa.) Detroit, 1830.*

DE LA BECHE, H. T.,
Geological Manual. Philadelphia.*
The Geological Observer. Philadelphia.*

DE LAMAI-ELAINE, M. L.,
Dictionary Port. de l'Academie Français. 2 vols. Paris, 2nd edition, 1815.

DE LEHAMENDI, A.,
A Spanish Grammar. Charleston, 1826.*

DE MORGAN, AUGUSTUS,
Arithmetical Books. London, 1847.
The Globes, Terrestrial and Celestial. London, 2nd edition, 1847.

DE PEYRAC, MADAME,
Comment on parle à Paris. New York, 1856.*

DE REVILLE, A. J. C.
See *Bentz & De Reville.*

DE ROSILBY.
See *Trapany.*

DE SACY, A. J. S.,
Prineiples of General Grammar. Translated by D. Fosdick, Jr. Andover, 1st edition, 1834, (New York, 1837.)

DE STAEL, MADAME,
De l'Allemagne. New York.*

DE VERE, SCHELE,
Outlines of Comparative Philology. New York, 1853.
Grammar of the Spanish Language. New York, '54.*

DE VILLENEUVE, FRANCOIS A.,
Dictionnaire François-Italien. Edited by Nardini. Venice, 1804.

DE VERICOUR, L. R.,
Monern French Literature. Revised by Chase. Boston, 1848.

DE WITT, SIMON,
Elements of Perspective. Albany, 1813.*

DE WOLF & BROWN,
First Lines of Arithmetic. Hartford, 1818.

DE WOLF, ——,
Instructive Speller and Handbook of Derivative Words. Cincinnati, 1863.*
DEAN, HENRY,
Analytical Guide to the Art of Penmanship, with a History of Writing and Printing. Boston.*
DEAN, SAMUEL,
Writing Copies. New York.*
DEARBORN, BENJAMIN,
The Columbian Grammar. Boston, 1795.
DEARBORN, N.,
The American Text-Book for making Letters. Bost.*
DEL MAR, EMANUEL,
Theoretical and Practical Grammar of Spanish Language London, 2nd edition, 1834. (N. York, '27.)
Guide to Spanish and Eng. Conversation, (Guia, &c.) New York.*
DEMOSTHENES,
Oration on the Crown. Edited by J. T. Champlin. Boston, 1st edition, 1843. 3rd edition, 1850.
Select Orations. Ed. by J. T. Champlin. Bost., '48.*
I., II., III., Philippics. Ed by M. J. Smead. Bost., '51.*
The Olynthiac Orations, &c. Translated by C. R. Kennedy. New York, 1857.*
The Orations. Translated by T. Leland. N. Y., '31.*
De Corona. Translated by D. Spillan. Beaver, Penn.*
Translated by Student of Dublin University. Princeton, 1851.*
DENMAN, J. S.,
Student's Primer. New York, 1853.*
Student's Spelling Book. N. Y., 11th edition, 1853.
Student's First Reading Book. New York.*
Student's Second Reading Book. N. Y., 13th ed., '55.*
Student's Third Reading Book. N. Y, 3rd ed., 1852.
Student's Fourth Reading Book. New York.*
Student's Fifth Reading Book. New York.*
Student's Speaker. New York, 1853, '55.*
Watt's Improvement of the Mind, with Quest. N. Y.*
DENS, PETER,
Synopsis of Moral Theology. Translated by Berg. Philadelphia, 1855.*
DESPAUTER, ——,
Grammar Reformed. Edited by Watt. (Grammar made Easy.) Edinburgh, 5th edition, 17 *
DESPREZ, LUDWIG,
Horatii Opera. (Delph. edition,) London, 1727.
DEW, THOMAS,
Digest of Laws, &c., of Ancient and Modern Nations. New York, 1853.*
DEWEES, WILLIAM P.,
Compendious System of Midwifery, for Students. Phila., 11th edition.*
DEWEY, ——,
Pike's Arithmetic. New York.*
DEXTER, WILLIAM P.,
Rose's Chemical Tables. Boston, 1850.*
DICKENS, CHARLES,
Child's History of England. 2 vols. N. Y. Bost.*
DICKINSON, ADAM,
Gradus ad Parnassum, ab uno e Soc. Jesu. Edinburgh, 1821.
DICKINSON, RUDOLPHUS,
The Columbian Reader Boston, 1st edition, 1815. 3rd edition, 1821.
Elements of Geography. Edited by E. Hoyt. Boston, 1813.
DILLAWAY, C. K.,
The Classical Speaker. Boston, 1837.*
Roman Antiquities and Ancient Mythology. Boston, 1831. 3rd edition, 1837. 12th edition, 1850.*
Dana's Liber Primus. Boston, 20th edition, 1852. Philadelphia, 1856.)
Colloquies of Erasmus. Philadelphia, 1856.*
Cicero—De Oratore. Philadelphia.*
Cicero—De Officiis. Philadelphia. Boston, 1837.*
" De Senectute, et De Amicitia. Boston, '37. Philadelphia.*
" De Natura Deorum. Philadelphia.*
" Tusculan Questions. Philadelphia.*
Plautus, with English Notes. Philadelphia.*
Quintilian, " " " Philadelphia.*
Tacitus, with English Notes. Philadelphia.*
Terence, " " " Philadelphia.*
DILWORTH, THOMAS,
New Guide to the English Tongue, (Spelling Book, &c.) London, (1st edition, 1740. 26th edition, 1764.) Boston, 1767, 1711. 46th edition, 1784. Philadelphia, 1st edition, 1819. (Portsmouth, 1795. New Haven.)
Schoolmaster's Assistant. (London, 1781.) Hartford, 23rd edition, 1786. New York, 1793, 1806. Brooklyn, 1807. (New London, 1797. Albany, 1824.)**
Key to do. (*Anon.*) New York, 1812.
Federal Calculator Revised by D. Hawley. Troy, 1st edition, 1803. 2nd edition, 1805.
Epositor, (Arithmetic.)*
The Young Book-Keeper's Assistant. London, 1798, 1806.*
The Book-Keeper's Assistant. Edited by R. Wiggins. New York, 1822.
Dictionary.*
DINGLEY, CHARLES,
The Intellectual and Practical Singing Book. New York, 1834.*
DIOMEDES,
Artis Grammat. Libri III., (Grammatici Latin. By H. Keil.) Leipsic, 1857.
DITTMAR, HEINRICH,
Historischer Atlas. Two numbers. Heidelberg, 1852.
DIX, MISS D. L.,
Conversations on Common Things. Boston, (1824.) 2nd edition, 1826. 8th edition, 1840. 9th edition, 1841, 1843. (New York.)
DIXON, HENRY,
The English Instructor; or the Art of Spelling Improved. Boston, 1736. 9th edition, 1750.*
DOANE, HIRAM H.,
New Grammar in Familiar Lectures. Watertown, 1841.
DOBSON, J.,
Æsop's Fables, in French. Philadelphia, 1854.
See *Picot & Dobson.*
DOCHARTY, G. B.,
A Practical and Commercial Arithmetic. N. Y. '54.
Institutes of Algebra. New York, (1852.) 1857.
Elements of Geometry. New York, 1857.**
Elements of Geometry, Trigonometry, &c. N. York, 1857.*
DODD, J. B.,
Elementary and Practical Arithmetic. New York, 1st edition, 1849. 16th edition, 1851.**
New Common School Arithmetic. Philadelphia, 1855.*
Arithmetic for High Schools. New York.*
Elements of Algebra. New York.*
Key to do. New York.*
Algebra for High Schools and Colleges. New York, 1851.*
Elements of Geometry and Mensuration. New York, 1855.*
Trigonometry. New York.*
DODDRIDGE, PHILIP,
Friendly Instructor. Boston, 1749, 1750. 6th edition, Phila., 1771.*
DÖDERLEIN, ——,
Latin Synonymes. Translated by H. H. Arnold. Boston, 1860, 1861.*
See *Jacobs & Döring.*
DOLBEAR & BROTHERS,
Science of Practical Penmanship. New York, 5th edition, 1837.*
DONALDSON, A.,
The Orthographer. Philadelphia, 1st edition, 1814.*
Introduction to do. Philadelphia, 1814.*
DONALDSON, J. W.,
The New Cratylus. London, 2nd edition, 1850. 3rd edition, 1859.**
DONATUS, A. E.,
Ars Grammatica, (Keil's Grammatici Latini.) Leipsic.
DONNEGAN, JAMES,
New Grammar and English Lexicon. By Patton. Boston, 1st edition, 1832.*

Greek and English Lexicon. Revised by Patton and Alexander. Philadelphia.*
Same, abridged. Philadelphia.*
New Greek and English Lexicon. Edited by J. M. Cairns. Philadelphia, new edition, 1846.

DORIGO, F.,
The A-B-C of Music. See *A. Panseron.*

DÖRING, F. W.,
Horatii Omnia Opera. London, 1826.

DOUAI, A.,
Practical and Complete German Grammar. Boston, 1860, '61.

DOUGHERTY, PETER,
A Chippeway Primer. New York, 2nd edition, '47.*
Short Reading Lessons in the Objiway Language. New York, 1847.*

DOUIN, MADAME,
French and Eng. Primer. Trans. by McIntosh. N. Y.*
Spanish Primer. New York.*

DOWD, J. N. E.,
English Grammar. Middletown, 1830.*

DOYLE, DAVID,
Pinkerton's Geography, epitomized Phila., 1805.

DRAPER, B. H.,
Conversations of a Father on Natural Philosophy, &c. New York, 1834.*

DRAPER, JOHN W.,
Text-Book on Natural Philosophy. New York, 1st edition, 1847. 3rd edition, 1859.
Text-Book on Chemistry. New York, (1846.) New edition 1860.
Kane's Elements of Chemistry. New York.*
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XIV. EDUCATIONAL MISCELLANY AND INTELLIGENCE.

Dr. Tappan, and the University of Michigan. Since the brief memoir of Dr. Tappan, and especially of his eminently successful administration of the affairs of the University of which he was President, was in type, we have seen notices of the action of the Regents whose term of office expires with the year, and who signalized their own demise by the removal of Dr. Tappan from the Presidency. From personal knowledge of the condition of the University, and to some extent, of the public mind of Michigan respecting it, and higher education generally, at the time Dr. Tappan was elected President, we can bear our testimony to the magnitude of the work which it has been his good fortune to achieve in a period of ten years—a success, so far as we know, without a precedent in the educational history of the country; and we must record now our amazement and indignation at the outrage done to the cause of good letters, and at the exhibition of ingratitude for large public service, in his summary removal. We have asked in vain for any adequate reasons for such an act of savage, unmitigated barbarism. The act itself, and time and manner of doing it—without any assigned reasons, right after the commencement exercises of the graduating class, without any call from any responsible parties in or out of the University—by a Board whom the People had just superseded, looks more like the work of malignant personal enemies, of small half-educated bar-room politicians, or religious bigots, clothed with a little brief authority, than the guardians of a great literary institution who should know neither sect or party. It is very evident that the men who have done this deed, do not appreciate the enthusiasm of an accomplished scholar in his unselfish ambition to build up a great school of learning, or what is due to a public officer who has labored faithfully and successfully in a field, which attract but little of popular favor. But the cruel deed is done, and the perpetrators, we fear, from the telegrapic rapidity with which a successor was appointed, have so surrounded their action with personal, political, and denominational pre-arrangements and complications, that this great personal and institutional wrong can not be redressed, and that henceforth the State University of Michigan will pass into the general history of all Western State Colleges and Universities—to which it has thus far been an exception—a victim of selfish, half-educated politicians, and short-sighted religious bigots.

Since the above paragraph was penned we have received a copy of "*An Address of the Alumni of the University of Michigan to the People of the State of Michigan,*" *on the removal of Dr. Tappan from the Presidency.* Its declarations are explicit, its appeal for justice strong, and the people of the State, if true to their own great educational and literary interests will call for explanations, and if these are not satisfactory, will prompt the incoming Board of Regents to save the University and the State from the disgrace of Dr. Tappan's removal. We publish the Address entire.

Address of the Alumni of the University of Michigan, to the People of the State of Michigan.

The Alumni of the University of Michigan, assembled at the University on the 9th day of July, 1863, pursuant to general call, respectfully present to the people of the State the result of their deliberations in relation to the recent action of the Board of Regents in the removal of the Rev. Dr. H. P. Tappan from the Presidency of the University.

Waiving all question in respect to the validity of such proceeding under the constitution of the State; recognizing, for the purposes of this paper, in the Board of Regents the legitimate authority for such removal whenever the interests of the University shall require it; and acknowledging also that a faithful and considerate regard for such interests requires of those who have already enjoyed the noble munificence of the institution, the entire abnegation of merely personal preferences as well as the subjection of all personal hostility; while at the same time it demands a fearless and manly statement of their convictions in respect to all measures which pertain to such interests;—

The Alumni now urge upon your attention the following considerations:

That from the nature of our University; from the character of its relations with the community at large; from the great importance of harmonious action and the careful avoidance of all partizan political or sectarian irritation; from the dignity of educational interests; and from the momentous consequences resulting from the disturbance of settled policies in institutions of this character; from these considerations, without reference to the manifest inexpediency of forcing issues upon constitutional questions of power and the distribution of governmental authority, the action of the Regents in the removal of the "principal executive officer" of the chief educational institution in the State, can only be shown to have been for "the true interests of the University" by the existence of an imperative necessity.

This officer was called to the position by the predecessors of the present Board; by the men upon whom the constitution had imposed the duty and the responsibility of selecting a suitable person for the important functions of the office; by those who had previously had large experience in the management of the University, and through whose counsel the office was created, with the express object of remedying the lamentable evils which had heretofore arisen in the administration of the institution on account of the want of a visible and responsible and *permanent* head of the University.

The person so deliberately chosen by a body of men of such high standing in the State, and possessed of such opportunities for right judgment, entered upon his duties in the month of October, 1852. And we can not better describe the condition of the institution at that time than by placing before you an extract from the final report of the Board of Regents then in power.

"At the commencement of their duties they encountered some perplexing embarrassments, which, for a time, retarded their efforts to infuse new life and energy into the institution. They found the University in debt, the entire income of the year anticipated, the warrants dishonored at an empty treasury, one of its most important departments unpopular, and the prominent literary professors who still had charge of this department, smarting under what they and their friends regarded as an insulting public dismissal." "The peculiar or-

ganization of the University under the old system, particularly the absence of a permanent executive officer or President, to watch over and control its internal affairs, more than any other cause, led to the misunderstanding between the former Regents and Professors. Under the existing system we trust a similar misunderstanding will never occur."

So far had public confidence and respect been withdrawn that, notwithstanding the constant increase in the population of the State, and notwithstanding the general appreciation of the advantages of a gratuitous liberal education, the number of students in the department of letters had diminished to the small total of about forty, and the hold upon these was very precarious.

We can not find more reliable evidence of the change which was wrought within the term of office of that Board, than by again extracting from their report:

"As soon as the financial condition of the University, and the information in possession of the Board justified the measure, Henry P. Tappan, LL. D., of New York city, was elected President of the University, and by virtue of his office became its principal executive officer, which duty he has steadily performed with honor to himself and profit to the institution over which he presides. Believing that his views of a proper University education are liberal, progressive, and adapted to the present age, we have sustained him to the extent of our ability, in all measures for the advancement of the University, and it gives us pleasure to add, that we have rarely disagreed with him as to its true interests, during the period we have been associated in charge of the institution. The prosperity of the University and its adaptation to the highest educational wants of the people, can no longer be questioned. The evidence of this is found in its present freedom from financial embarrassment, and in the deservedly high reputation it maintains at home and abroad."

The report shows that at its date (December 31st, 1857) the number of students had increased in the department of letters to two hundred and seventy-six, (during a period of great financial embarrassment,) and in the other departments, to such an extent, that there were four hundred and fifty students then in attendance.

And the Board of Visitors of that year (Hon. J. D. Pierce, the first Superintendent of Public Instruction, and Hon. H. C. Knight) in their report set forth "what the University had become:"

"It has been founded about twenty years. Within that period much useful experience has been acquired, and some erroneous ideas have been corrected. The experiment of a government *without a head* has been tried and abandoned. Whilst much good has been done and foundations have been laid during all these twenty years, the decided prosperity of the University is quite recent. Within three years, it has, by a sudden leap, reached a rank in reputation and actual efficiency, not perhaps equal with the very first of American institutions, but certainly inferior to very few."

Let it be marked by all that, at this most difficult period in the administration of affairs, there was no conflict of authority between the President and the Regents, no allegation that there had been any arrogation by the former of the powers and prerogatives of the latter. On the contrary, by mutual confidence, respect and cordiality, by earnest co-operation and conciliatory bearing, without jealousies or unjust suspicions, or unworthy depreciation of motives, the

work of building up the institution had gone forward with entire harmony and most gratifying success.

It is quite evident from these facts and this experience, that there was no necessary conflict in the legitimate duties of the President and the Board—no inevitable occasion for any misunderstanding between them, in the honest effort to fulfill their responsibilities, without sinister objects or ulterior ends. And it seems also fairly inferable that there was nothing in the character, conduct or views of the President at all incompatible with a due regard for the proper authority of the Regents, or calculated to embarrass them in any legitimate action.

It was not until the present Board acceded to power that any difficulties arose. A recurrence to the history of those difficulties will enable the public to judge whether any imperative necessity, or even any considerate regard for the interests of the University, demanded or justified the recent action of the Board in the removal of the President.

Before doing this, however, it should be stated that every published report of the Board of Regents, and the respective Boards of Visitors, down to the present time, has represented the University to be in a most prosperous condition, and constantly improving in reputation and efficiency. And it has never been intimated to the people that there was any occasion for any important change in the management of the institution.

A reference to the published "School Reports" of the past ten years will verify our statement, and will also aid us in the consideration of the causes which instigated the removal of the President.

No formal statement of reasons for this action has been given to the public, or placed upon the records of the Board.

Why not? Was it because the charges were of such a monstrous character that, from a considerate regard to Dr. Tappan, the Board humanely avoided publication to the world?

His open challenge to the Board at the time of their action, and the reiterated demands of his friends since that day, stamp with falsity the base innuendo.

Was it because the Regents so highly recognize the dignity of their office that they do not consider it compatible with their elevated duty to make known their grounds of action?

This Board, unlike any other, have courted notoriety; from the day of their accession to office, they have proclaimed that their meetings were open to all; they have urged newspapers to send reporters, and, in the absence of such, one of their own number has himself "kept the public fully informed" of such measures as would help on his purposes. If it was thought proper to put before the public the most unimportant as well as the least creditable details of their proceedings, it is scarcely probable that this matter was suppressed from a delicate sense of propriety.

Was it because they feared the effect of "agitation" upon the interests of the University?

We protest that if sound reasons existed, a calm, fair and impartial exposition would in nowise have induced such excited discussion or such violent feeling as the method adopted was calculated to provoke. The permanent welfare of such an institution will hardly be promoted by the silent, unexplained expulsion of a chief officer whose services have been publicly acknowledged and appreciated during a long series of years.

No! such motives did not actuate the men in power; we believe that events will show—(no matter how it may be hereafter attempted to frame a subtle defense of the action)—that the Regents did not dare to place then upon the record and before the people their real reasons.

The determination of those favoring the removal was secret. It was not even mentioned to a part of the Board until the day before the action. No discussion was had in the Board or by any formal meeting.

The proceeding was purposely abrupt and disrespectful. All ordinary courtesy was ignored. The resolutions were curt and betokened malice—they did not recognize any merit, nor acknowledge the slightest service, nor admit the discharge of any duty by the officer who had labored in the institution for many years. And, to make their action more personally offensive, they pursue a similar course with a member of his family who had quietly, unobtrusively and acceptably discharged the humble duties of Librarian.

We believe that events will show that the removal of Dr. Tappan is to be attributed to the personal hostility and selfish ambition of one member and to the cold, money-grasping purposes of another member of the Board.

They came into power on the 1st of January, 1858. Immediately the columns of one of the Detroit papers were occupied with lengthy letters from anonymous correspondents, purporting to be located in different portions of the State, while in fact they all clearly marked the same author. These letters, with occasional articles, were continued through a series of years; they contained low-bred attacks upon the President, insulting innuendoes impeaching his integrity, ridiculing his character and depreciating his efforts; they fomented difficulties among the professors and paraded before the public their petty bickerings; they disparaged the astronomical observatory, and sought to wound the sensibilities of the director; they caviled at the slightest expenditure for the purpose of aiding this officer in his efforts, and they made light of his studies and the results of his observation. The unfortunate incident of his connection with the President condemned him as an additional object of assault from ignorant malice.

The venom of these articles proved its own antidote. The spirit which dictated them was so manifestly malignant that they ceased to have any influence upon the public mind except disgust toward the author.

Unsuccessful in this effort, and learning wisdom from experience, a more covert and insidious plan was adopted. The public avowal had been made that the President should be removed before the Board went out of office; and the person making it was too persistent to be baffled or discouraged by a single failure.

Under the pretext that the rules for the government of the University required compilation and revision, he obtained such action that a "Code of By-laws," &c., was presented to the Board within a few months after their accession to office, and when they were comparatively unacquainted with the administration of the institution. The spirit and purpose of the Code was to take from the President very many of the powers which had been conceded to him by the previous Board, some of which were essential to his efficiency as the "chief executive officer of the University." By specious argument the Regents were induced to adopt this code, were led to believe that upon them alone rested the entire responsibility of the administration of the institution, without ref-

erence or deference to the President. Ten standing committees were appointed, among whom the power was nominally divided; but, in fact, one Regent was chairman of seven of the most important committees. And, in process of time, almost the entire duties of the Board were devolved upon the two Regents whose proximity to the University enabled them to assume the power most readily. One of these men being Chairman of the Finance Committee, and also custodian of the funds, and having obtained the appointment of a near relative as Steward, made it his special task to demonstrate by his practices the complete subordination of the President to *his* arbitrary authority. Without prolonging this review, we believe that we are justified in charging that the removal of the President is to be attributed to the constant scheming and unwearied efforts of a small minority in the Board. In saying this we do not ignore the fact that written evidence exists showing a secret intrigue on the part of two persons—one formerly connected with, and another now a member of the Faculties—having in view the supplanting of Dr. Tappan, and the elevation of his elected successor. It may hereafter transpire that this influence working upon the Board during the past five years, has assisted in the accomplishment of the result. But it is to the systematic operations of this minority in the Board that the State is chiefly indebted for the present condition of things. By personal detraction through the press, by insults in the meetings of the Board, by studied disrespect in the presence of undergraduates, the head of the University has been beset for the past six years. Instead of advice and support and cordial co-operation, he has met with contempt; instead of a hearty sympathy in his efforts to build up a complete and finished University, his plans have been ridiculed, his projects hampered and embarrassed, and his action repudiated.

Members of the Faculties have been chosen, and others removed, without consultation with him. And when in the organization of a most important department, he suggested the expediency of selecting some person widely known and of extended influence throughout the country, the intimation was not only disregarded but was made use of to prejudice the opinions of those who were elected.

Hostility to the President with members of the Faculties has been purposely engendered and kept alive; jealousy of his authority and his reputation has been incited, and complaints to the Regents have been encouraged. To such an extent have members of the Faculties been made to feel their independence of the President and their complete subjection to the Regents, that when the latter required of them some open "acquiescence" in the recent action, they put before the public a garbled statement of the proceedings of the meeting of ten (out of twenty-two) members of the University Senate—a statement which did not truly set forth the action then taken.

Flagrant falsehoods in respect to the moral influence of the President over the students, and as to the character of University discipline, have been slanderously put forth to destroy his hold upon right-minded people.

Through these various instrumentalities, the removal has been effected; and with it, as an inevitable and anticipated result, the Regents have also gained the resignation of Dr. Brunnow, the Director of the Astronomical Observatory —a modest, unobtrusive gentleman, whose genius and scholarly attainments are recognized by the highest scientific men in his department, both in Europe

and America. We do not cast the responsibility upon all the members of the Board. We believe that the majority of those favoring the action were the unwitting instruments of others, and that they were misled. Unworthy purposes in reference to the election of a successor—improper considerations which every friend of the University should frown upon, doubtless rendered some members more open to conviction and more ready to believe.

Certainly, if they had met the question in the proper manner, if they had required an open and impartial hearing of charges, they would have shown themselves more worthy of their high position, and would, perhaps, have arrived at a different conclusion.

They *are* responsible for the discourteous, unjust and arbitrary manner in which the proceedings were conducted.

The simple fact of their adopting such an important measure at the close of their term of office, without the slightest consultation with their successors, justifies the suspicion that their purpose was to forestall the action of the new Board, and to embarrass them in the consideration of the subject.

If they had only created the vacancy, and committed the choice of a successor to those who were soon to fill their places, and upon whom the responsibility of the choice would, of necessity, largely devolve, there would have been less reason for the belief that it was the purpose to surround the measure with such influences that it would require much firmness, independence and determination to investigate the grounds of their action.

The University belongs to the people of Michigan. Its endowments were made for your benefit. Its growth and prosperity are matters of personal interest to you.

We shall not undertake to show that the presence of Dr. Tappan and his character and influence are essential to its continued efficiency. The object of this paper is to place before you the grounds upon which the Alumni believe that great wrong to the person, and great injury to the institution, have been accomplished by the recent action of the Board.

Many of us were students under the old regime when there was no head to the University. Many have been students under the present administration; all concur with him who has been so unexpectedly (to us) called to take charge of the institution, that "the strength and reputation which the noble University of Michigan has attained, is to be attributed to the supervision of the" late "President." With that gentleman, too, we have had occasion to admire "the enterprise and faithfulness with which the late "President has educated the public opinion of Michigan." With him, the Alumni do "gratefully remember his former kindness, and our very pleasant and, to us, profitable associations in the past." But (*not* with him) do we indicate *our* gratitude by allowing the President to be rudely ejected from his office, and notified to quit his house, without uttering our solemn protest to the people of the State, whose servants have abused their trust.

In conclusion, the Alumni do not think themselves bold to say that, from their knowledge of the career of Dr. Tappan as President, from their acquaintance with his system of discipline, his demeanor with the students, his efforts with the people to make known the University and its real character, and to increase the public interest in its welfare; from his enlarged views of, and elaborate dissertations upon, the educational interests of the State, and from his

earnest and successful appeals among our citizens for the establishment of the "Dotroit Observatory of the University;" from the exalted character which he has attained as an able and eloquent divine, a Christian gentleman of just and liberal spirit, a philosophical scholar, unsurpassed in attainments, and a patriot who has infused the noblest sentiments and aspirations into the hearts of all with whom he has been associated; from the enthusiastic and almost unanimous verdict of the entire body of students who have been committed to his instruction; from the strong testimony of the great body of his neighbors in Ann Arbor, and of all citizens with whom he has been familiarly acquainted; from the various evidence which they possess, Dr. Tappan is the most fit and desirable incumbent of the office of President of the University—most acceptable to the great body of the people of the State, and less likely than any other person to create discord, irritation and opposition; and the Alumni therefore urge his reappointment to the Presidency.

In behalf of the Alumni by the Committee.

S. D. MILLER,
M. H. GOODRICH,
ASHLEY POND,
C. H. DENISON,
} Committee.

J. S. NEWBERRY, President of the Convention.

REV. C. S. ARMSTRONG,
REV. C. R. PATTISON,
} Vice Presidents.

H. M. UTLEY,
C. H. DENISON,
} Secretaries.

The following Tabular Statement exhibits the number of students in the Collegiate Department, (exclusive of the Legal and Medical Schools,) from 1851 *to* 1863, *with their distribution into their respective courses:*

Year.	Classical Course.	Scientific Course.	Select Course.	Total.	Graduates.
1851,	64			64	10
1852,	57			57	9
1853,	60			60	10
1854,	93			93	20
1855,	95	46	14	155	17
1856,	105	96	57	238	20
1857,	112	98	102	312	34
1858,	125	102	82	312	48
1859,	130	83	74	287	39
1860,	135	67	82	284	36
1861,	149	55	69	273	56
1862,	135	50	100	285	48
1863,	112	44	100	266	28

Name, or Description of Institution.	No. Professors or Teachers.	No. of Students or Pupils.	Estimated Value of Land and Buildings.	Estim. Value of Sch'l Furniture, Maps, Appara. tus, Museums, and Libraries.	Estimated Annual Income.	Religious Denomination, or otherwise.
1. Toronto University, including University College,...	12	250	$610,000	$85,000	$55,000	(Public.)
2. Victoria College University, Cobourg, ...	20	200	50,000	2,000	12,000	Wesley. Methd'st.
3. Queen's College University, Kingston, ...	18	160	75,000	5,000	13,300	Ch. of Scotland.
4. Trinity College University, Toronto, ...	7	40	100,000	10,000	17,000	Ch. of England.
Four Roman Catholic Colleges, viz.:						
1. St. Joseph's College, Ottawa	12	50	30,000	2,000	6,000	Rom. Catholic.
2. Regiopolis College, K'gston	12	100	50,000	4,000	12,000	
3. St. Michael's College, T'nto	11	100	40,000	2,000	8,000	
4. L' Assomption College, Sandwich,.....	5	50	10,000	600	5,000	
Two Theological Colleges, exclusively, viz.:*						
1. Knox College, Toronto,....	3	50	20,000	4,000	5,000	Canada Presbyt'n.
2. Congregational College of B. No. America, Toronto	2	10	1,000	800	3,000	Congregational.
Three Collegiate Seminaries, viz.:						
1. Belleville Seminary,.....	12	150	12,500	600	10,000	Meth. Episcopal.
2. Canadian Literary Institute, Woodstock,.	6	160	10,000	800	8,000	Baptist.
3. Wesleyan Female College, Hamilton,.....	10	136	20,000	500	10,000	Wesley. Methd'st.
Two Royal Grammar Schools, &c., viz.:						
1. Upper Canada College, T'no	10	130	10,000	1,000	20,000	(Public.)
2. Model Grammar School, "	8	90		800	10,000	
Three Normal and Model Schools, viz.:						
1. Normal School, Toronto,...	5	150	150,000	1,200	20,000	
2. Boys' Model School, " ...	3	150		400		
3. Girls' Model School, " ...	3	180		400		
County Grammar Schools.						
86 Grammar Schools.	127	4,766	40,000	8,000	83,000	
Three Industrial Schools, viz.						
1. Friends' Seminary, near Picton, ...	5	60	8,500	500	4,000	Quaker.
2. Indian Industrial School, Alnwick, ...	2	30	5,000	250	850	Wesley. Methd'st.
3. Indian Industrial School, Mount Elgin,.....	2	30	5,000	250	850	" "
4019 *Elementary Schools, viz.:*						
(1.) 3,910 Common Schools,..	4,180	316,287	2,100,000	60,000	1,350,400	(Public.)
(2.) 109 Roman Catholic Separate Schools, ...	160	13,631	27,000	1,000	30,000	Roman Catholic.
351 *Miscellaneous, viz.:*						
(1.) 30 Indian Schools, ...	35	800	3,000	200	5,000	Various.
(2.) 320 Private Schools,.....	400	7,354	60,000	2,000	44,400	"
(3.) 1 Deaf and Dumb School, Toronto,.....	2	20	500	100	4,000	(Public.)
or 4,477 Educational Institutions, in all, in U. Canada.						
Grand Total for U. Canada,..	5,072	345,134	$3,437,500	$193,400	$1,736,800	

* In addition to these purely theological colleges, there are theological faculties in the Universities of Trinity College, Toronto, and Queen's College, Kingston, as well as the Roman Catholic colleges at Ottawa, Kingston, and Toronto, and in the Baptist Literary Institute, at Woodstock.

A GENERAL STATISTICAL ABSTRACT,

Exhibiting the comparative state and progress of Education in Upper Canada, as connected with Universities, Colleges, Academies, Private, Grammar, Common, Normal, and Model Schools, from the year 1842 to 1861. Compiled from returns in the Eductional Department.

No.	SUBJECTS COMPARED.	1842.	1843.	1844.	1845.	1846.	1847.	1848.
1	Population of Upper Canada,	486·055	No Reports for this year were received in consequence of a change in the School Law.	.....	*622·570	.....	.....	..725·879
2	Population between the ages of five and sixteen years,	141·143		183·539	202·913	204·580	..230·975	..241.102
3	Colleges in operation,	 5		 6	 5	 5	 6	 6
4	County Grammar Schools,**	.... *25		.... *25	.... *31	.... *32	 32	 33
5	Academies and Private Schools reported,***	.... *44		.... *60	.... *65	.... *80	 96	 117
6	Normal and Model Schools for Upper Canada,	.....		.....	.....	.....	 2	 2
7	Total Common Schools in operation as reported,	.... 1·271		.... 2.610	.... 2.736	.... 2·589	.... 2·727	.... 2·800
8	Total Roman Catholic Separate Schools,	.....		.....	.....	.....	.....	.....
9	Free Schools reported in operation (included in No. 7 above,)	no reports		no reports	no reports	no reports	no reports	no reports
10	Grand Total Educational Establishments in operation in Upper Canada,	.... 1.795		.... 2·700	.... 2·837	.... 2·706	.... 2·863	.... 2·958
11	Total Students attending Colleges and Universities,	no reports		no reports	no reports	no reports	 700	 740
12	Total Pupils attending Country Grammar Schools,**	.... do.		.... do.	.... do.	.... do.	.... 1·000	.... 1·115
13	Total Pupils attending Academies and Private Schools,***	.... do.		.... do.	.... do.	.... do.	.... 1·831	.... 2·345
14	Total Students and Pupils attending Normal and Model Schools for Upper Canada,	.... do.		.... do.	.... do.	.... do.	.....	 256
15	Total Pupils attending the Common Schools of Upper Canada,	...65·978		.. 96·576	.. 110·002	.. 101·912	.. 124·829	.. 130·739
16	Total Pupils attending the Roman Catholic Separate Schools,	.....		.....	.....	.....	.....	.....
17	Grand Total, Students and Pupils attending Universities, Colleges, Academies, Grammar, Private, Normal, Model, and Common Schools,	...65 978		.. 96·756	.. 110·002	.. 101·912	.. 128·360	.. 135·195
18	Total amount paid for the Salaries of Common and Separate School Teachers in Upper Canada,¶	$166,000		$206,856	$286,056	$271,624	$310,396	$344,276
19	Total amount paid for the erection or repairs of Common and Separate School Houses, and for Libraries and Apparatus, Books, Fuel, Stationery, &c.,¶	no reports		no reports	no reports	no reports	no reports	no reports
20	Grand Total paid for Common and Separate School Teachers' Salaries, the erection and repairs of School Houses, and for Libraries and Apparatus,¶	.... do.		.... do.	.... do.	.... do.	.... do.	.... do.
21	Total amount paid for Grammar School Masters' Salaries,¶	.... do.		.... do.	.... do.	.... do.	.... do.	.... do.
22	Total amount paid for the erection or repairs of Grammar School Houses,¶	.... do.		.... do.	.... do.	.... do.	.... do.	.... do.
23	Amount *received* by other Educational Institutions, &c.,‡	.... do.		.... do.	.... do.	.... do.	.... do.	.... do.
24	Grand Total paid for Educational purposes in Upper Canada,¶	.... do.		.... do.	.... do.	.... do.	.... do.	.... do.
25	Total Common School Teachers in Upper Canada,	.....		.....	.... 2·860	.... 2.925	.... 3·028	.... 3·177
26	Total Male do. do.	.....		.....	.....	.....	.... 2.365	.... 2·507
27	Total Female do. do.	.....		.....	.....	.....	 663	 670
28	Average number of months each Common School has been kept open by a qualified Teacher,§	.....		.... 7¾	 8	.... 8½	.... 8½	 9

A GENERAL STATISTICAL ABSTRACT,—Continued.

No.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	1858.	1859.	1860.	1861.
1	.....	803·493	.. 950·551	.. 953·239	.....	.....	.....	.....	.....	.....	.....	.....	.. 1·396·091
2	253·364	259·258	.. 258·607	.. 262·755	.. 268.957	.. 277·912	.. 297·623	.....	.. 324·888	.. 360.578	.. 362·085	.... 373·589	.. 384·980
3	 7	 7	 7	 8	 8	 9	 10	 12	 12	 12	 13	 13	 13
4	 39	 57	 54	 60	 64	 64	 65	 61	 72	 75	 81	 88	 86
5	 157	 224	 175	 181	 186	 206	 307	 267	 276	 301	 321	305	 337
6	 2	 2	 2	 3	 3	 3	 3	 3	 3	 4	 4	 4	 4
7	.. 2·871	.... 3·059	.... 2·985	.... 2·992	.... 3·095	.... 3·200	.... 3.284	.... 3·391	.... 3·631	.... 3.772	.... 3·848	..... 3·854	..... 3·910
8	.....	.....	 16	 18	 32	 44	 41	 81	 100	 94	 105	 115	 109
9	no reports.	 252	 855	 901	.... 1·052	.... 1·177	.... 1 211	.... 1·263	.... 1.707	.... 1·936	.... 2·315	..... 2·602	..... 2·903
10	.. 3.076	.... 3·349	.... 3·239	.... 3.262	.... 3·386	.... 3·526	.... 3·710	.... 3·815	.... 4·094	.... 4·258	.... 4·372	..... 4.379	..... 4·446
11	.. 773	 684	 632	 751	 756	 806	.... 1·100	.... 1.335	.... ‖1·335	.... ‖1 335	.... ‖1·373	..... ‖2.373	..... ‖1·373
12	.. 1·120	.... 2·070	.... 2·191	.... 2·643	.... 3·221	.... 4·287	.... †3·726	.... †3·386	.... 4·073	.... 4.459	.... 4·381	..... 4·546	..... 4·766
13	.. 3·648	.... 4·663	.... 4·557	.... 5·084	.... 4·440	.... 5·473	.... 7·584	.... 6 220	.... 6·523	.... 6·372	.... 6·182	..... 6.408	..... 7·361
14	.. 400	 370	 356	 645	 735	 622	 643	 772	 746	 777	 718	 700	 700
15	138.465	.. 151·891	.. 168·159	.. 179·587	.. 194·736	.. 204·168	.. 222·979	.. 243·935	.. 262 673	.. 283·692	.. 288 598	.... 301·104	.... 316·287
16	.....	.....	.....	.....	.....	.....	.... 4.885	.... 7·210	.... 9·964	.... 9·991	.... 12·994	.... 14·708	.... 13·631
17	144·406	.. 159·678	.. 175.895	.. 189·310	.. 203·888	.. 215·356	.. 240·917	.. 262 858	.. 285·314	.. 306·626	: 314.216	.... 328·839	.... 342·745
18	$353,912	$353,716	..$391,308	..$428,948	..$489,764	..$578,868	: $680,108	..$779,680	..$860,232	..$777,616	..$859,325	.. $895,591	.. $918,113
19	no reports.	$56,756	.. $77,336	..$100,366	..$128,072	..$175,472	..$219,164	..$298,428	..$351,926	..$265,519	..$250,721	.. $264,183	.. $273,305
20	....do.	$410,472	..$468,644	..$529,314	..$617,836	..$754,340	..$899,272	$1,078,108	$1,212,158	$1,043,135	$1,110,046	$1,159,774	$1,191,418
21	... do.	no reports.	Included	in other Ed-	ucational	Institutions.	$46,255	.. $47,659	.. $57,552	.. $52,940	.. $61,564	.. $64,005	.. $71,034
22	....do.	.... do.					$5,711	.. $8,311	.. $10,708	.. $2,868	.. $7,930	.. $6,037	.. $4,234
23	....do.	.... do.	..$131,336	..$147,956	..$150,104	..$174,016	..$204,754	..$192,014	..$214,849	..$219,979	..$210,042	.. $218,632	.. $209,421
24	....do.	.... do.	..$599,980	..$677,270	..$767,940	..$928,356	$1,155,992	$1,326,992	$1,405,267	$1,318,922	$1,389,582	$1,448,448	$1,476,107
25	.. 3·209	.... 3·476	.... 3·277	.... 3·388	.... 3·539	.... 3·539	.... 3·565	.... 3 689	.... 4·083	.... 4·202	.... 4·235	..... 4·281	..... 4.336
26	.. 2.505	.... 2·697	.... 2·551	.... 2·541	.... 2·601	.... 2·508	.... 2·568	.... 2·622	.... 2·787	.... 2·965	.... 3·115	..... 3·100	..... 3·031
27	.. 704	.... 779 $\frac{1}{4}$	 726	 847	 938	.... 1·031	 997	.... 1.067	.... 1·296	.... 1.237	.... 1·120	..... 1·181	..... 1·305
28	.... $9\frac{1}{2}$ 6	.... $9\frac{1}{1}$ 7	.... $9\frac{1}{2}$	.... $9\frac{1}{2}$	.... $9\frac{2}{3}$	.... $9\frac{2}{3}$	.... $9\frac{2}{3}$	 10	 10	.... $10\frac{1}{2}$	.... $10\frac{1}{2}$	..... $10\frac{1}{2}$	..... $10\frac{3}{4}$

* An approximation only—no specific information having been received by the Department. † A decrease—caused by the institution of an Entrance Examination for the Grammar Schools. ‡ Including Normal and Model Schools,&c., from 1855. § Including holidays and vacations. ‖ Principally taken from 1860—no report being received since. ¶ Balances due but not collected were included until 1858, but from that date Nos.18, 19, 20, 21, 22, and 24, represent actual payments only. If we add to the Grand Total (24,) the unexpended balances, we should have an available sum of $1,670,024 for Educational purposes during 1861; and for 1860, $1,615,670—the increase in 1861 being $54,354. ** Academies included until 1851. *** Academies not included until 1851. NOTE.—The Returns in the foregoing Table, up to the year 1847, are not very complete; but since that period they have been sufficiently so as to establish data by which to compare our yearly progress in Educational matters. The Returns are now pretty extensive, and embrace all Institutions of Learning, from the Common School up to the University.

National and State Teachers' Associations. The Annual Meetings of the several State Associations of Teachers, as well as of the American Institute of Instruction, and of the National Teachers' Association were never more numerously attended than during the current year. We hope in our next number to give a summary of the proceedings of all these meetings for 1863.

We shall be under great obligations to the Secretary, or other officer, who will prepare and forward a brief History of each Association, giving the name of the original founders, the date and place of each meeting, and name and subject of each lecturer, &c.

Simonson's Circular Zoological Chart. We intended to have noticed at some length a very ingenious and useful Chart of the Animal Kingdom, constructed by Prof. Simonson, of Hartford, Conn., by which the classification of animals into their several sub-divisions, species, and varieties, can be seen and distinguished in a glance. This Chart will be published by Schermerhorn, Bancroft & Co., 130 Grand st., New York, and we commend it to the careful examination of every teacher who wishes to have at hand on his table, or the wall of his school, or class-room a convenient reference, or authority to settle the classification and characteristics of any disputed specimen of Zoölogy.

Warren Colburn's First Lessons. We are indebted to the publishers, Frederick A. Brown & Co., 1 Cornhill Street, Boston, for a copy of a new edition of "*Colburn's First Lessons in Arithmetic.*" This is one of the schoolbooks which we ever took any special pains to get into schools under our supervision; and we are glad to welcome it in new type, and with a fresh indorsement by our friend Dr. G. B. Emerson, who forty years ago, introduced it into the English High School of Boston, "as the most original and most valuable work upon the subject that has yet appeared." This high praise is as just now as when it was first penned.

Wilkins' Stenciling and other Inks. Having suffered much annoyance from the use of thick, corroding, and fading inks, it gives us great pleasure to express our great satisfaction with the qualities of several kinds of Ink manufactured by *Wilkins & Co., Detroit, Michigan*, which a friend has sent us for trial, and we think our friends among teachers, editors, and public offices in the West, will thank us for calling their attention to these inks, manufactured in their own section. We know of none better.

American Phototype Company. We have before called the attention of our readers, and of all interested in wood-cut illustrations, to the economy, as well as the excellence of the photographic electrotypes of the American Phototype Company, whose place of business is No. 2 LeRoy Place, Beekman Street, New York City. We give on the next page an accurate and spirited copy by the same process, of the engraving (from steel,) in Elstob's edition of "*Ascham's Latin Epistles.*" The plate gives the only portrait of that "grand Old Master," which has been followed on one of the panels of one of the Committee rooms of the new Houses of Parliament. We have here also, the portraits of several other historic names in education, that of Sir John Checke, the teacher of Queen Elizabeth, of Elmer, the teacher of Lady Jane Gray, and of John Sturm, the greatest educator of the sixteenth century. To Sturm, we owe the School Codes of Saxony, and Wirtemberg, the Academy of Geneva, and the most valuable suggestions of Ascham's "*Schoolmaster.*"


Demosthenes.
M.T. Cicero.
Edwardus Sext. Rex.
Maria Regina.
Elizabetha Regina.
Jana Graya.
Joannes Cheeus Eqd.
Joannes Elmarus Epis.
Joannes Sturmius.
Guilielmus Cecilius Baro
D. Thomas Smith Eq.
Joannes Sleidanus
N. Burgdan

NOTE.

MATHEMATICS IN EDUCATION.

Goldsmith's opinion of mathematics and logic were shared by Warburton, Gray, and other eminent writers. Bishop Warburton, in the Introduction to his Discourse on "*Julian*," says:—

"The use of these boasted instruments of truth [Logic and Mathematics,] goes no further than to assist us, the one in the form of reasoning, the other in the method of discourse.

"Aristotle's invention of the categories was a surprising effort of human wit. But, in practice, logic is more a trick than a science, formed rather to amuse than to instruct. And, in some sort, we may apply to the art of syllogism what a man of wit says of rhetoric, that it only teacheth us to name those tools which nature had before put into our hands, and taught the use of. However, all its real virtue consists in the compendious detection of a fallacy. This is the utmost it can do for truth. In the service of chicane, indeed, it is a mere juggler's knot, now fast, now loose; and the schoolmen, who possessed it in a supreme degree, are full of its legerdemain. But its true value is now well known; and there is but little need to put it lower in the general estimation.

"However, what logic hath lost of its credit for this service, mathematics have gained. And geometry is now supposed to do wonders, as well in the system of man as of matter. It must be owned, the real virtue it hath, it had acquired long since: for, by what is left us of antiquity, we see how elegantly it was then handled, and how sublimely it was pursued. But the truth is, all its use, for the purpose in question, besides what hath been already mentioned, seems to be only habituating the mind to think long and closely: and it would be well if this advantage made amends for some inconveniences, as inseparable from it. It may seem perhaps too much a paradox to say, that long habit in this science incapacitates the mind for reasoning at large, and especially in the search of moral truth. And yet, I believe, nothing is more certain. The object of geometry is demonstration, and its subject admits of it, and is almost the only one that doth. In this science, whatever is not demonstration, is nothing; or at least below the professor's regard. Probability, through its almost infinite degrees, from simple ignorance up to absolute certainty, is the *terra incognita* of the geometrician. And yet here it is that the great business of the human mind is carried on, the search and discovery of all the important truths which concern us as reasonable creatures. And here too it is that all its vigor is exerted: for to proportion the assent to the probability accompanying every varying degree of moral evidence requires the most enlarged and sovereign exercise of reason. But the harder the use of any thing, the more of habit is required to make us perfect in it. Is it then likely that the geometer, long confined to the routine of demonstration, the easiest exercise of reason, where much less of the vigor than of the attention of mind is required to excel, should form a right judgment on subjects, whose truth or falsehood is to be rated by the probabilities of moral evidence? I call mathematics the easiest exercise of reason, on the authority of Cicero, who observes, 'that scarce any man ever set himself upon

this study, who did not make what progress in it he pleased.'* But besides acquired inability, prejudice renders the veteran mathematician still less capable of judging of moral evidence. He who hath been so long accustomed to lay together and compare ideas, and hath reaped the richest fruits of speculative truth for his labor, regards all the lower degrees of evidence as in the train only of his mathematical principality: and he commonly disposes of them in so despotic a manner, that the *ratio ultima mathematicorum* is become almost as great a libel upon reason, as other sovereign decisions. I might appeal, for the truth of this, to those wonderful conclusions which geometers, when condescending to write on history, ethics, or theology, have made from their premises. But the thing is notorious: and it is now no secret that the oldest mathematician in England is the worst reasoner in it. But I would not be mistaken, as undervaluing the many useful discoveries made from time to time in moral matters by professed mathematicians. Nor will any one so mistake me, who does not first confound the genius and the geometer; and then conclude that what was the achievement of his wit, was the product of his theorems.

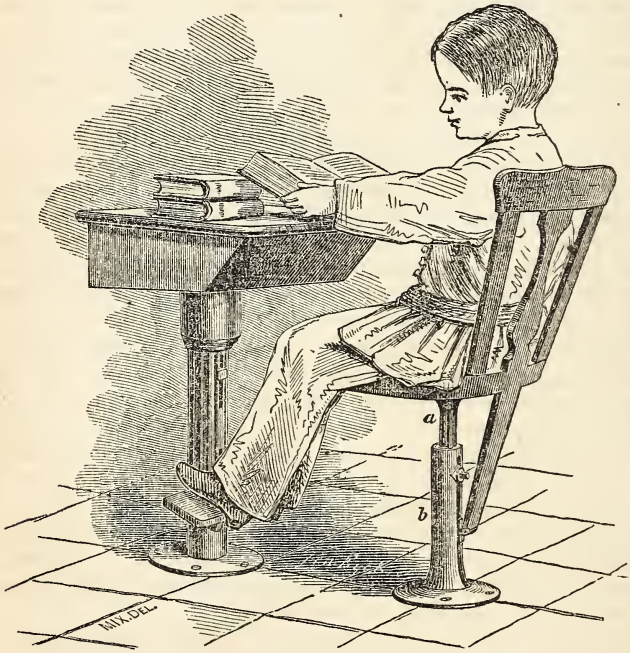
"Yet still it must be owned, that this discipline habituates the mind to think closely; and may help us to a good method of composition. In those most unpromising ages, when the forms of the schools were as tedious and intricate, as the matter they treated, was absurd or trifling, it hath had force enough to break through the bondage of custom, and to clear away the thorns that then perplexed and overgrew the paths of learning. Thomas Bradwardin, a mathematician, and Archbishop of Canterbury, in the fourteenth century, in his famous book *De causa Dei*, hath treated his subject, not as it was wont to be handled in the schools, but in the better method of the geometers. And in another instance, of more importance, he hath given the age he lived in an example to emancipate itself from the slavery of fashion, I mean in his attempt (as by his freedom with the fathers it seems to be) of reducing their extravagant authority to its just bounds. But yet, so true is the preceding observation, that though mathematics, in good hands, could do this, it could do no more: all the opening it gave to truth could not secure Bradwardin from the dishonor of becoming advocate for the most absurd opinion that ever was, the Anti-Pelagian doctrine of St. Austin; in which the good archbishop was so much in earnest, that he calls the defense of it, the cause of God."

Gray, says his biographer Mitford, "would never allow that mathematical knowledge was necessary in order to form the mind to a habit of reasoning or attention." In a letter to a friend written during his residence at Cambridge, he asks: "must I pore upon mathematics? Alas! I can not see in too much light; I am no eagle. It is very possible that two and two make four, but I would not give four farthings to demonstrate this ever so clearly; and if these be the profits of life, give me the amusements of it. The people I behold all around me, it seems, know all this and more, and yet I do not know one of them who inspires me with any ambition of being like him."

* Quis ignorat. ii., qui mathematici vocantur, quanta in obscuritate rerum, and quam recondita in arte and multiplici subtilitate versentur? quo tamen in genere ita multi perfecti homines exstiterunt, ut nemo fere studuisse ei scientiæ vehementius videatur, quin, quod voluerit, secutus sit. *De Orat.* l. i.

Chase's Adjustable School Desk and Seat.

To meet the want, long felt, of a style of seat and desk, capable of being adapted to the exceptional cases in every school, viz., of persons, who are above, or below the maximum or minimum height provided for in a particular grade of school,—or who require from incipient deformity, or any other cause, a chair or desk with special reference to height or position, Mr. Amos Chase, of North Weare, New Hampshire, has constructed an *Adjustable School Desk and Seat*, which is represented in the following cut, and for which he has obtained two patents.



The seat is rigidly secured to the rod, *a*, which slides smoothly in the hollow cylinder, *b*, this cylinder being enlarged at its base and fastened firmly to the floor. The middle slat of the seat's back is lengthened downward and attached at its lower end to a projection from the rod, *a*, which passes through a vertical slit made in the cylinder, *b*, for that purpose; this slit being of sufficient length to allow the arm to slide up and down with the rise and fall of the seat. The seat is secured in any desired position by a set-screw.

The desk is also made adjustable in height by a similar arrangement; the foot-rest being supported on an arm which is fastened to the sliding-rod, and passes through a slit in the cylinder or stand.

Beside the facility of adjustment, the convenience of sweeping a room provided with these desks and seats is apparent.

Further information in relation to the matter may be obtained by addressing the assignee, N. C. Page, at North Weare, N. H.



CAPT ALDEN PARTRIDGE.

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I. REGULATIONS

RELATIVE TO

THE ADMISSION OF CADETS INTO THE MILITARY ACADEMY.

APPLICATIONS for admission into the United States Military Academy at West Point, should be made by letter to the Secretary of War. By provision of law, each Congressional and Territorial district, and the District of Columbia, is entitled to have one cadet at the Military Academy, and no more. The district appointments are made on the nomination of the member of Congress representing the district at the date of the appointment. The law requires that the individual selected shall be an actual resident of the Congressional district of the State or Territory, or District of Columbia, from which the appointment purports to be made. Also, appointments "at large," not to exceed ten, are annually made. Application can be made, at any time, by the candidate himself, his parent, guardian, or any of his friends, and the name placed on the register. No preference will be given to applications on account of priority; nor will any application be entered in the register when the candidate is under or above the prescribed age; the *precise age* must be given; *no relaxation of the regulation in this respect will be made;* nor will any application be considered in cases where the age and other qualifications of the candidates are not stated. The fixed abode of the candidate, and *number* of the Congressional district which he considers his permanent residence, must be set forth in the application. The pay of a cadet is $30 per month, to commence from his admission into the Military Academy, and is considered ample, with proper economy, for his support.

The appointments will be made annually in the month of February or March, on the applications made within the preceding year. The claims of all the candidates on the register will be considered and acted upon. No certain information can be given as to the probable success of the candidate, before the arrival of the period for making the selections. Persons, therefore, making applications, must not expect to receive information on this point.

As a general rule, no person will be appointed who has had a brother educated at the institution.

QUALIFICATIONS.

Candidates must be over sixteen and under twenty-one years of age, at the time of entrance into the Military Academy; must be at least five feet in height, and free from any deformity, disease, or infirmity, which would render them unfit for the military service, and from any disorder of an infectious or immoral character. They must be able to read and write well, and perform with facility and accuracy the various operations of the four ground rules of arithmetic, of reduction, of simple and compound proportion, and of vulgar and decimal fractions.

It must be understood that a full compliance with the above conditions will be insisted on—that is to say—the candidate must write in a fair and legible hand, and without any material mistakes in spelling, such sentences as shall be dictated by the examiners; and he must answer promptly, and without errors,

all their questions in the above-mentioned rules of arithmetic: failing in any of these particulars, he will be rejected.

It must also be understood, that every candidate will, soon after his arrival at West Point, be subjected to a rigid examination by an experienced medical board; and should there be found to exist in him any of the following causes of disqualification, to such a degree as will immediately, or in all probability may at no very distant period, impair his efficiency, he will be rejected:

1. Feeble constitution and muscular tenuity; unsound health from whatever cause; indications of former disease; glandular swellings, or other symptoms of scrofula.

2. Chronic cutaneous affections, especially of the scalp, or any disorder of an infectious character.

3. Severe injuries of the bones of the head; convulsions.

4. Impaired vision from whatever cause; inflammatory affections of the eyelids; immobility or irregularity of the iris; fistula lachrymalis, &c., &c.

5. Deafness; copious discharge from the ears.

6. Loss of many teeth, or teeth generally unsound.

7. Impediment of speech.

8. Want of due capacity of the chest, and any other indication of a liability to a pulmonic disease.

9. Impaired or inadequate efficiency of one or both of the superior extremities on account of fractures, especially of the clavicle, contraction of a joint, extenuation, deformity, &c., &c.

10. An unnatural excurvature or incurvature of the spine.

11. Hernia.

12. A varicose state of the veins, of the scrotum and spermatic cord, (when large,) sarcocele, hydrocele, hemorrhoids, fistulas.

13. Impaired or inadequate efficiency of one or both of the inferior extremities on account of varicose veins, fractures, malformation, (flat feet, &c.,) lameness, contraction, unequal length, bunions, over-lying or supernumerary toes, &c., &c.

14. Ulcers, or unsound cicatrices of ulcers likely to break out afresh.

The above Regulations were issued by the War Department in 1862. Although it appears from this official document, that "applications for admission into the United States Military Academy at West Point, should be made by letter to the Secretary of War," and that "the claims of all candidates on the register will be considered and acted upon," it is also stated, that "*the district appointments are made on the nomination of the member of Congress representing the district at the date of the appointment.*" This delicate duty, and great privilege of selecting, out of all the young men between the ages of sixteen and twenty-one years, in a Congressional district of at least 70,000 inhabitants, who aspire to serve their country in a military capacity, the one *best* qualified, or even *well* qualified, is not imposed or conferred directly by law, but by the practice of the appointing power, on the member for that district.

REPORT OF THE BOARD OF VISITORS FOR 1863.

The Board of Visitors invited by the Secretary of War to visit the Military Academy at West Point, to make "a full and free investigation of the Military and Scientific instruction of the Cadets, and of the internal police, discipline, and fiscal concerns of the institution, and communicate the results of their observations, with any suggestions for the improvement of the Academy," consisted of the following members:

Oliver S. Munsell, *Illinois*, PRESIDENT. Birdsey G. Northrop, *Mass.*, SECRETARY. Thomas M. Allen, *Missouri.* Henry Barnard, *Connecticut.* Samuel W. Bostwick, *Ohio.* Thomas Brainard, *Penn.* Cyrus Bryant, *Illinois.* A. W. Campbell, *West Virginia.* Ralph W. Emerson, *Mass.* Oran Faville, *Iowa.* John H. Goodenow, *Maine.* P. D. Gurley, *District of Columbia.* Oliver P. Hubbard, *New Hampshire.* Edward Maynard, *District of Columbia.* Henry S. Randall, *New York.* William H. Russell, *Conn.* William A. Rust, *Maine.* Albert Smith, *New Hampshire.*

The Visitors introduce an account of their inspection with the following remarks:

Some of our number came with objections and prejudices against the Academy. But all doubts as to the value and importance of the institution were banished by the evidence presented in the course of our personal inquiries into its present condition and actual results. The Mexican war clearly evinced the value of military science. Still more has the present war demonstrated the necessity of maintaining, and even enlarging our Military Academy.

This Academy belongs to the whole nation. So far as its purpose and numbers permit, it is the Peoples' College. It is maintained for the special benefit of no particular section, sect, party, or class. We could discover no evidence of aristocracy, exclusiveness, or caste. The Cadets represent all sects and parties, and almost all nationalities, now naturalized among us. The poor are not denied its privileges, for the expenses of all are paid alike. If particular dogmas have at any time prevailed here, the fact is an accidental, rather than an essential one, and should be referred to the ruling influences at the seat of government, and not to any inherent element in the local organization at West Point.

Their Report has been communicated to the Secretary, by whom the same will be transmitted to Congress—to receive such attention as the Secretary and Congress may see fit to bestow on its various suggestions. By permission of the Secretary, we transfer to our pages, that portion of the Report in which the subject of the Admission of Cadets—their number, age, attainments, and mode of appointment, is discussed with considerable fullness.

ADMISSION OF CADETS.

In concluding the report of their inspection of this, the only national military school, to which the country naturally looks for the organization and command of her armies, and the construction of her works of defense, the Visitors would respectfully urge on the consideration of the Department, an immediate and thorough revision of the law and regulations relating to the admission of Cadets—the number, the qualifications required, and the mode of ascertaining these qualifications, and of making the appointments. No matter how appropriate may be the location, how complete the buildings and equipment, and how skillful and faithful the teachers, unless there is a constant and sufficient supply of pupils of the right age, character, bodily and mental vigor and aptitude, as well as aspirations for a military career, the public will be disappointed in the practical workings of the institution.

1. The number of pupils in the Military Academy is determined by the law, which limits the Cadet Corps of the United States Army to one cadet for each Congressional District in the several States, one for each Territory, one for the District of Columbia, and to forty more, whom the President may appoint, ten each year, from the country at large, without reference to their residence. Under this law, if each Congressional District and Territory were represented, the whole number of cadets would be two hundred and eighty, but owing to vacancies by withdrawal or non-appointment in Congressional Districts in the States involved in the rebellion, the number at this time is reduced to less than two hundred—and the graduating class of 1863, to twenty-five—a number altogether inadequate for the regular army in time of peace, and much below the present and future exigences of the service, while the expense of the Academy remains the same. We are assured by the Superintendent that without any additional expense for building and material equipment, and with a small advance in the pay of pupils and assistant teachers, the Cadet Corps could be increased to four hundred. The Visitors are unanimously of the opinion that the corps should be at once increased to this number, and should be maintained at this maximum at all times, by authorizing the President to appoint to any vacancy which may remain unfilled for three months by reason of nullification, secession, rebellion, or any other cause. If the appointments to fill and maintain the Corps at this maximum, can be selected out of the many American youths, ambitious to serve their country in the army, on the plan of an open competi-

tive examination in the several States, the Visitors believe that ninety out of every one hundred thus appointed will go through the whole course with honor, and the average ability, scholarship, and good conduct of the whole corps, will equal that now reached by the first ten of each class.

2. By the original law providing for the appointment of cadets to the corps of Artillerists and Engineers, and by the act of 1812, by which the Military Academy was made to consist of the Corps of Engineers, the candidates for cadets were to be "not under the age of fourteen, nor above the age of twenty-one years." By regulations of the Department the minimum age is fixed at sixteen years, and the Visitors believe that the interests of the Academy and the military service, will be promoted by making the legal age for admission between eighteen and twenty-one years. The four years preceding and including eighteen are peculiarly the formative period of the body, mind, and character, and should be devoted to the acquisition of right habits of study and general culture, as the proper foundation for all special and professional training, which should not be commenced until the constitution is consolidated, the taste for a pursuit is distinctly pronounced, and the moral character is naturally developed under the influences and supervision of home. The experience of Europe, and particularly of France and England, has led to the abandonment of juvenile military schools, as nurseries for officers; and the very common practice of nominating candidates who exceed the legal age, expresses the convictions of our own people that military studies now require more maturity of mind than was deemed necessary in the early history of the Academy. The present want of uniformity as to age and mental discipline explains in part, the wide disparity of attainments between members of the same class. With few brilliant exceptions, confined to cadets of rare aptitude and vigor of mind, the most solid practical education is obtained by those who come to West Point when at least eighteen years of age, with at least a good preparation in English studies, and a taste for mathematical and military pursuits.

3. The school attainments required by law of candidates for admission to the Military Academy, are as rudimentary and limited as our language can express—far below, we are assured, the requisitions of any similar school in the world. Prior to 1812, when the Academy was little more than a school of mathematics, taught by two professors, in the line of geometrical and algebraical demonstrations, and the practical exercises were confined to surveying, and the simplest forms of military construction, the candidates were not

subjected to any examination. The act of 1812, provides that "each candidate previously to his appointment, shall be well versed in reading, writing, and arithmetic," and by regulations of the department, the knowledge of arithmetic is restricted to only a portion of that science. There were special reasons at the start for thus limiting the amount of knowledge, when the minimum age of admission was fixed at fourteen years, and the Academy was properly a juvenile military school, like all cadet schools in Europe at that time. At that date, science entered far less than now into the art of war, as applied to the means and modes of attack as well as of defense. Besides, the opportunities of even elementary instruction were then far less widely or equally distributed through all the States than now, when the general government has set apart over sixty million acres of the best land in aid of primary schools in all the new States, and nearly every State legislature has subjected the entire property of their several communities to taxation for the support of public instruction. Now that the requirement as to age has been advanced from the fourteenth to the sixteenth year, and by the voluntary action of parties having the nomination, or seeking the appointment, to the eighteenth year, we see no reason why the school attainments corresponding to, and compatible with that age, should not be also required. The least that should be demanded of any candidate is that amount of general culture and attainments, which constitutes a good English education, and which it is now the aim of the public schools, and their boast, to give without partiality, to all, poor and rich alike, if the advantages they proffer are properly improved. And we see no injustice in fixing the standard of general attainments and culture as high as that now reached by cadets in good standing at the close of their first year in this Academy, including even an elementary knowledge of one modern language. If the French, or Spanish, or German language is to be mastered by American officers for the sake of the military science and literature which it embodies, or its uses in conversation, or official duty, called for by the exigences of our foreign relations, both in peace and war, its acquisition should be begun as early in life as possible, while the organs of speech are flexible, and the grammatical and etymological difficulties of a new language are more readily surmounted. Judging from the results of the examinations we have witnessed here, and what we know of the attainments made by students in colleges elsewhere, very few persons, who begin the study of modern languages, late in their school life, in the pressure of other studies, ever attain the mastery of even one, so as to be able to use it as an instrument of written or spoken com-

munication, or make its treasures of science and literature a familiar possession.

Whatever may be thought of the disciplinary and practical value of earlier and longer attention to one or more modern languages, to those, whose minds will otherwise be almost exclusively subjected to the peculiar training of the mathematics, there can be no doubt that young men who have reached the age of eighteen, and desire to profit by the special studies of a purely military school, should exhibit in their language, habits, and attainments that intellectual, moral, and esthetical culture, which the public or private schools of any State can, and should give to any youth of average ability of that age.

4. Low as the requirements for admission now are, from a defective and vicious mode, as we believe, of selecting candidates, and making appointments to the Cadet Corps, the number of candidates nominated and provisionally appointed, who present themselves at West Point and shrink from any examination, or who fail to pass even the entrance examination which is confined to reading a few passages of familiar English prose or verse, and writing a few sentences from dictation, and performing on the blackboard a few operations of the most elementary character in arithmetic,—or being admitted, are not able to gain or keep a respectable standing for one year, although the studies of the first year belong to a general, and not a military education,—or by a "special providence," manage just to escape dismission from incompetency, and graduate,—is disgracefully large. The country abounds in youth, competent to master and profit by the course of instruction here provided, and ambitious of enjoying these privileges of education, and opportunities of distinction; and a selection by lot from the juvenile population of any state, could not result in so few prizes, and such a dreary waste of blanks as have been realized from the appointments made, in the necessary absence of all personal knowledge of the candidates by the appointing power, on the recommendation, or nomination of one or more persons in each Congressional District, in no way responsible for the incompetency of the individuals named.

From official tables prepared from the records of the Academy,* it appears that the proportion of all who graduate, to all appointed in successive periods of ten years, is as follows:

For Ten Years,	from	1802	to	1811,	. . . . .	0.606
" " "		1812	to	1821,	. . . . .	0.289
" " "		1822	to	1831,	. . . . .	0.377
" " "		1832	to	1841,	. . . . .	0.472
" " "		1842	to	1851,	. . . . .	0.510
" " "		1852	to	1861,	. . . . .	0.523

* See Boynton's "History of Military Academy at West Point," p. 293.

From official returns furnished by the Superintendent, a portion of which are hereto appended, (B. C.) it appears that out of 4626 who have been admitted to the Corps of Cadets, (including two hundred now members,) only 2020 were able to graduate, and of those who failed, (2398, excluding those who remain,) more than three-fifths broke down in the first year in studies which in almost every military and scientific school in Europe are required for admission. Out of the whole number regularly nominated, recommended, and provisionally appointed from 1841 to 1863, more than twenty per cent. failed to pass the examination, as to health and constitution, or the slight examination in reading, writing, and cipher-ing. And this proportion would be increased by the number who withdrew in advance from the consciousness of their unfitness for a position to which ambitious and influential friends had promoted them. Out of the whole number admitted from 1851 to 1862, more than one-third failed during their first year. The proportion of graduates to the whole number admitted is 46 per cent. and of those who failed to graduate, 54 per cent.

The Visitors are unanimously of opinion that in a matter of such vital importance as the right organization and command of the armies of the United States, on which the honor and safety of the whole country depend, the original appointment to the Cadet Corps which is the *first step* in promotion to such command, as well as to all the special duties which attach to the engineer service, should not be made in any case except on the principle of finding the best youth for the place— having the health, character, vigor of body, maturity and aptitude of mind, and preparatory knowledge, to profit by the opportunities of the special military training provided by the government for this corps, and a decided taste and expressed desire for a military career. And to this end, the law and regulations should provide for the rigorous exclusion in advance of all who can not present testimonials from the teachers under whose instruction they have been for the two years next previous, that in their opinion they possess the qualifications above specified, and who do not make a written declaration of their desire to enter the Corps for the purpose of qualifying themselves to labor in the military service of the government, to which they will bear true allegiance against all enemies foreign and domestic, and over all state and local authority, government and constitution whatever. To select the best out of any number who may present their testimonials and written declarations, public examination should be held of all applicants at such times and places as the

law should prescribe, by such persons and under such regulations as the Department shall be authorized to appoint; and the results of such examination of each person examined, and in each subject specified by law, should be returned to the Department, in which return the applicants should be arranged in the order of merit. From this merit roll, revised from year to year, all appointments to the Cadet Corps should be made, and in the order of merit as assigned by the examiners.

This principle of appointment and promotion by merit which we advocate, is in full and successful operation in the classification and advancement of cadets in the Academy itself, and the country will be satisfied if the same principle can be as fairly and rigorously enforced on all who aspire to enter, as well as on all promotions in the service after leaving the institution. The principle itself, of selection by merit, either in the mode of public examination, or of careful and searching inquiry by competent and impartial educators, designated for this purpose by the parties to whom custom and not law had assigned the grave responsibility of nominating candidates, has been voluntarily applied in several Congressional Districts. Not a cadet known to have been thus selected and appointed, has ever broken down from want of vigor of body or mind, or failed to reach and maintain an honorable position on the merit roll of the Academy; and to this careful selection by those who felt the responsibility of the privilege accorded to them, is the country indebted for its most eminent and useful officers.

To the objection that selection by public competitive examination, will involve expense, we reply, that any expense which will do away with the prejudices against the Academy, which the present system of patronage has done so much directly and indirectly to evoke and foster, and which will, at the same time, exclude incompetent, and secure the services of vigorous, talented, well trained officers, for every arm of the service, will be well incurred. But, in our opinion, there will be no more expense in selecting and educating a given number of cadets on this plan, than on the present. The two thousand cadets who were appointed by patronage and failed to graduate, cost the government, directly and indirectly each year, a much larger sum than it would have taken to have excluded them in advance from the institution by competitive examination, and filling their places by better men; and their exclusion by substituting better material, would have been an incalculable gain to the Academy, facilitating its discipline, increasing the value of its instruction, and giving to the army a larger number of competent officers.

The objection, that the mode of making all appointments by open competitive examination, will deprive the President, and members of Congress of the opportunity of appointing the sons of meritorious officers, or poor, and it may be, orphan boys of genius—is more plausible than real. That such appointments have been made, to the manifest advantage of the country, is certain. But we know not a single instance of such marked success, on the part of a cadet thus appointed, as to attract investigation, where the same youth would not have secured the appointment in open competition. But if he had failed, and the place had been filled by one better qualified, the country would have been no loser, and he would have suffered no injustice or neglect. We fear, from an abuse of this amiable motive of rewarding meritorious parents, and assisting the poor, that in some instances, weak, ignorant, and incompetent persons are appointed, as though this Academy were a public charity school, or home for orphans; and not a special school for military instruction and training, for which the great object, in any mode of appointment, is to select those who will profit most by its advantages, and do the country the greatest service after being thus educated at its expense.

To the objections that, in these examinations, "the most forward boys will have the best chance, and such boys seldom make the best men," and that no amount of book knowledge can give assurance of the great military genius, "which must be born and not made," we reply, that these objections apply just as forcibly to any plan of nomination, and to every system of instruction. But we believe that those examinations can be and will be so conducted as to distinguish what is precocious from what is the healthy development of the faculties, what is solid from what is showy in attainments, what is vigor, grasp and aptitude of mind from what is mere memory and quickness, in competing candidates. All of these candidates must bring the testimonials of their former teachers, as to their character, ability and attainments, must have reached the age of eighteen years, and will be called upon to exhibit orally as well as in writing their knowledge and opinions on subjects which require judgment, reflection, presence of mind and decision. If a young man of eighteen and upward shows that he has done well what he had undertaken to do thus far in life, that he has preserved a sound constitution in vigorous health, has mastered the studies appropriate to his age, is honest, diligent, thoughtful, teachable, courageous, courteous, and ambitious of excellence generally, then the country has every assurance which can be given that on this basis of character, talents, attainments, and application, a solid fabric of military

education can be reared, and that in the hour of trial he will show not only courage to dare, but competence to devise, influence and command. In the responsibilities of such an hour will be found the fruitage of all his previous promise and preparation.

To the objection—"that a competitive examination must always result in the success of the best instructed, wholly irrespective of the capacity of the competing candidates; and the plan will thus secure for the country the services of dull mediocrity well instructed, and exclude genius without opportunities of development,"—we reply, that this does occur now under the present system, but need not, and never has been the result of competitive examination properly conducted. The examination which we propose to have inaugurated, is not to search simply or mainly for the results of memory or diligence, but for "vigor and aptitude of mind" in reference to the special purposes of this Academy. The examination will be poorly conducted, and will operate here widely differently than elsewhere, if it does not only exclude in advance palpable incompetency, and ascertain beyond doubt the possession by all the successful candidates, of that knowledge which is the basis of a special military training, but also seek, and give credit in the result, for the quick eye, the firm set mouth, the vigor and elasticity of body, the rapid decision, the contempt of danger, the competency to influence and command—and all the other marks of the incipient soldier and officer, as well as the mathematical tastes and qualities of mind which indicate the successful engineer. Composed as every Examination Commission might be, of at least one experienced officer of the United States Army, of one member (past or present,) of the Academic Board, of one officer of the State Militia, as well as one or more experts in educational matters, the military qualities of body, character and mind, will be sought for as well as the mere results of memory, diligence and good opportunities of instruction, in the competing candidates.

To the objection, that candidates will make special preparation, and in the phraseology of the class-room, "cram for the occasion," we reply,—to such preparation and cramming as cover the whole ground of a good English education, we can see no possible objection; the more of it, the better. If the preparation is only crude and on the surface, we are sure that the ploughshare of interrogation requiring precise answers, oral and written, will very soon expose its superficial and undigested character.

To the sifting out and selection by open competition, might be added a period of probation for the successful candidates—making

their first year's connection with the academy a further test of capacity, preparation, and aptitude for a military career. No pains and no expense should be spared to exclude from the academy and the service, incompetent, indifferent, and unteachable cadets and officers; such men are "cumberers of the ground," and no influence and inertia should be potent enough to resist the inevitable working of the principle of open competition, applied at frequent intervals, and at every stage of promotion, in getting rid of such cadets and officers.

The fact that such a public examination is to be held from year to to year, and that the educational privileges of this Academy, and immediate and prospective promotion in the army are the prizes which await success, will, in five years call forth more latent genius in the obscure corners and poor families of a State, than has ever been sought out by the lantern of patronage, (which is now seldom carried beyond the family, or neighborhood, or party of the person having the nomination,) since the foundation of the Academy. With the network of public and elementary schools, woven by state legislation over all the land—with public schools of a higher grade, and special schools of science and the arts already established, at short intervals, or which will be called into existence by the demand for a higher and different preparation from that now given, it may be safely said, that no genius, likely to attract the attention of a member of Congress, will exist, which will not be developed under the same influences by which the "dull mediocrity" of the rest of the community will be educated. Once set in the path of instruction and development, real genius will assert its own claims to attention, and will, on a first or second trial, before any board of examiners, make its vigor, courage, and persistence felt. The result will be the same in this institution, as in every really good Public High School and Free Academy—all classes as to wealth, occupation, religious and political affinities will be represented,—provided the regulations are judicious, and the examination practical and impartial.

This is the experience of the competitive principle in France ever since it was inaugurated by Carnot in the Polytechnic School at Paris, and Napoleon extended its application to every public special school, and to promotion in every department of administration, civil as well as military. And where is there more general administrative ability, central and local? Where are abler or better trained officers, military and civil, to be found? Where does "well instructed mediocrity," no matter how well backed up by wealth, find less favor, or genius for organization and command, no matter how poor or unfriended, find such speedy and sure recognition?

The experience of England in the trial of the two principles of patronage and competitive examination for admission, not only to the military and naval schools, but to the East India and the Civil service generally, is instructive, and especially on the points which we are now considering. Prior to the Crimean war, (which exposed the utter incompetency of a large number of officers, who had obtained their military education and promotion by patronage and purchase,)—admission to the Royal Military Academy at Woolwich, was by nomination, and the age fixed by law, was fourteen years.

The Secretary of War was satisfied by personal inquiry in 1855, that nothing could do so much to narrow and cramp the full development of a boy's mind, as his long confinement from so early an age among lads having the same limited attainments, special studies, and destination;—that a majority of those admitted on nomination and through influential friends, had only the minimum qualifications specified by law;—that to most cadets the severer studies were irksome and imperfectly mastered, on account of immaturity of mind and imperfect preparation;—that the certainty of promotion by influence and purchase, after obtaining the diploma of the Academy, and not unfrequently without it, took away all stimulus for continued study;—that resignations were common, when the profession of arms ceased to be a pastime, or could be exchanged for something that paid better—and the service was incumbered by officers without large and trained capacity for command, although not deficient in courage and dash. Under these circumstances the Secretary of War, advanced the minimum age of candidates from fourteen to eighteen years, removed all the general studies of the Academy into the preparatory course, and opened the doors of admission to those only, who could prove their title to enter by personal merit, in a free competitive examination. The same principle was applied to appointments and promotion in the new regiments called for by the exigences of the great war in which England found herself engaged.

Subjects, time, and places of examination, were officially made known throughout the kingdom, and commissions to conduct the examinations were appointed, composed of men of good common sense, military officers, and eminent practical teachers and educators. The results as stated in a debate in Parliament, five years later, on extending this principle to all public schools, and to all appointments and promotions in every department of the public service, were as follows:—In the competitive examinations for admission to the Royal Military Academy, candidates from all classes

of society appeared—sons of merchants, attorneys, clergymen, mechanics, and noblemen, and among the successful competitors, every class was represented. Among the number was the son of a mechanic in the arsenal at Woolwich, and the son of an earl, who was at the time a Cabinet Minister—the graduates of National Schools, and the students of Eton, and other great Public Schools. The most successful candidates were between the ages of eighteen and nineteen, as is found to be the case in competitions for admission to the Polytechnic School of France. Out of 579 successful candidates for the latter, between 1854 and 1857, 450 were over eighteen years. But the most important result of the competitive examinations for Woolwich, was the superior mental ability, the vigorous health, and eagerness for study exhibited by the new classes, and the small number who have failed on account of ill-health or incompetency. On this point, Mr. Edward Chadwick, in a Report before the National Social Science Association, at Cambridge, in 1862, says:—

"Out of an average three hundred patronage appointed cadets at the Royal Military Academy at Woolwich, for officers of engineers and the artillery, during the five years preceding the adoption of the principle of open competition for admission to the Academy, there were fifty, who were after long and indulgent trial, and with a due regard to influential parents and patrons, dismissed for hopeless incapacity for the service of those scientific corps. During the five subsequent years, which have been years of the open competition principle, there has not been one dismissed for incapacity. Moreover, the general standard of capacity has been advanced. An eminent professor of this university who has taught as well under the patronage as under the competitive system at that Academy, declares that the quality of mind of the average of the cadets, has been improved by the competition, so much so, that he considers that the present average quality of mind of the cadets there,—though the sorts of attainment are different, has been brought up to the average of the first classmen of this (Cambridge) university, which of itself is a great gain. Another result, the opposite to that which was confidently predicted, by the opponents to the principle, has been that the average physical power or bodily strength, instead of being diminished, is advanced beyond the average of their predecessors."

The opening of the Royal Military School at Woolwich to competition, on the basis of a more advanced age, and more thorough general education, has not only drawn in pupils of higher average ability and attainments, but has enabled the authorities to extend

the course of instruction. In this, the only safe way, they solved the problem which has tortured the ingenuity of the friends of our Academy—of crowding new studies acknowledged to be desirable if not indispensable, into a course already too crowded for cadets so unequally, and, many of them, so imperfectly prepared for the course as it is.

Another result of immense importance to the educational interests of Great Britain has followed the introduction of these open competitive examinations for appointments to the Military and Naval Schools, to the East India service, as well as to fill vacancies in the principal clerkships in the War, Admiralty, Ordnance and Home Departments of the government:—a stimulus of the most healthy and powerful kind, worth more than millions of pecuniary endowment, has been given to all the great schools of the country, including the universities of England, Scotland and Ireland. As soon as it was known that candidates, graduates of Trinity College, Dublin, had succeeded over competitors from Oxford and Edinburgh in obtaining valuable appointments in the East India service—the professors in the latter universities began to look to their laurels. As soon as it was known to the master of any important school, that some of his leading pupils might compete in these examinations, and that his own reputation as a teacher depended in a measure on the success or failure of these pupils, he had a new motive to impart the most vigorous and thorough training to his whole school.

The success of candidates who had never seen the inside of a government Military School, in open competition for appointments to the Artillery and Engineer Corps, in the new regiments raised in 1855, over those who hold the diplomas of the Royal Military Academy, was one of the reasons which led to a thorough revision of the whole system of military education.

These results, imperfectly presented here, will, the Visitors believe, be realized from the changes, which they now suggest, in the requirements as to age, attainments, capacity and aptitude, and especially in the mode of ascertaining these qualifications, of candidates for appointments to the Cadet Corps of the United States Army.

To the present low requirements, and mode of selecting cadets, do they attribute the hostility which they know exists, to some extent, against this Academy, in different parts of the country. The charges of personal, and political favoritism in making nominations, and the absence of reasonable search, among all the youth of a district, for the best qualified in natural endowments and acquired

knowledge irrespective of the poverty, or wealth, or occupation, or family, or party relations of the parents or guardians, we are forced to believe, in too many instances, to be well founded. To these hasty and injudicious nominations, do we attribute the bitter disappointments of so many individuals and families caused by the numerous failures to pass the almost formal entrance examinations in reading, spelling, penmanship, and elementary operations of arithmetic, or if admitted, to maintain a respectable standing in conduct and studies during their first year's connection with the institution. To this inequality of preparation and maturity of mind on entrance, do we attribute the astonishing disparity of capacity and attainments in the members of the same class, and the very large proportion of all who are admitted, who fail to graduate in very high standing as men of science or military promise.

To this want of preparatory knowledge, maturity of mind, and taste for mathematical and military studies, do we attribute most of the difficulties of internal administration, and class-room instruction. So long as the cadet is a boy, or if full grown in body, a youth with only boyish tastes, and without scholarly and soldierly aspirations,—so long as not a few are in the Academy, not because they sought its privileges from an inward and irrepressible impulse to a military career, but for the eclat of a military position to be resigned when such position involves sacrifices; *so long* will the admission of each new class, and especially, the period of encampment be signalized not only by boyish pranks, but by personal outrages on unoffending members of the same corps, which we had supposed to belong to the dark ages of collegiate institutions, when boyish inmates were congregated in large numbers away from the restraints of family discipline;—so long will the time, skill, and patience of able professors, which should be devoted to the elucidation of difficult scientific principles and their applications to military art, be engrossed in supplying the defects of an elementary education, which should have been obtained by the cadet as well, or better, at home; so long will the severe mathematical studies, and their special applications, difficult enough to task a well disciplined mind even with the preparation provided in a thorough knowledge of arithmetic, algebra, and geometry,—be irksome in the extreme, and be never mastered to any useful purpose to the army of the United States, by more than one half of the graduates of the Academy;—so long will the country be disappointed in the subsequent career of many graduates, for whose military instruction and training all these appropriate and costly preparations have been made.

In view of these and other considerations the Board of Visitors unanimously recommend that the law and regulations relating to the military academy be so modified as to provide as follows:

I. The Cadet Corps of the army of the United States shall consist of four hundred members, to which each state and territory shall be entitled to a number equal to its representation in the Congress of the United States, and the remainder shall be designated by the President from the country at large, including the District of Columbia; and he shall also fill, in the same way, any vacancy which for any cause may remain unfilled, for three months after the annual examination in each year.

II. No person shall be appointed to the cadet corps until he has been found qualified in the particulars designated by law, after a public examination conducted in such places, at such times, and in such manner as Congress shall prescribe; from which examination no person resident of that portion of the country for which the same is held, shall be excluded, who shall present credentials from the teacher or teachers whom he had last attended, that he is over seventeen, and under twenty-one years of age, of unblemished moral character, and personal habits, of good physical strength and constitution, and has given evidence of aptitude and vigor of mind for the studies and duties of a military career. The examiners shall make return under oath to the Secretary of War, of the persons so presenting themselves, examined, and found qualified, arranged in the order of merit, specifying the residence and school or schools which they have attended in the two years previous, and the degree of merit exhibited in each subject of the examination. And all appointments to fill vacancies for any state or territory, or for the country at large, shall be made from these returns, and in the order of merit as assigned by the examiners, until the same shall be revised by new regulations of the Department.

III. No person shall be returned to the Secretary of War as a suitable candidate for admission to the Cadet Corps, unless he

1. Shall be *over* seventeen, and under twenty-one years of age.

2. Shall possess an unblemished moral character and correct personal habits.

3. Shall be in good health, and in no way incapacitated by want of vigor and elasticity of physical constitution for military service.

4. Shall possess vigor and aptitude of mind for the studies of the Military Academy, and shall give evidence, oral and written, of a good English education, which, in view of the wide spread facilities of instruction in public and private schools, might very properly embrace

(*a.*) The correct use of the English language, in speaking, reading, and writing the same.

(*b.*) Penmanship, book-keeping, and elementary drawing.

(*c.*) The ability to perform with facility and accuracy the various operations of arithmetic.

(*d.*) The elementary principles of algebra and geometry.

(*e.*) A thorough knowledge of American geography and history, and the leading features of the Constitution of the United States, and of the State of his residence.

(*f.*) Or so much of the subjects above specified as shall be deemed indispensable to the immediate and profitable attention of the Cadets on their admission to the special studies and occupations of a military school.

5. Shall make a written declaration of his desire to obtain admission to the Cadet Corps for the purpose of qualifying himself for the military service of the United States, which service he assumes from the date of his appointment as cadet, to continue in the same for a period of at least sixteen years—bearing true faith and allegiance to the Constitution and government of the United States, against all enemies, foreign and domestic, and paramount to all obligations to any State government, authority, or constitution.

APPENDIX.

The Appendix to the Report of the Visitors of the Military Academy for 1863, contains the following tables and documents referred to in the Report.

TABLE A.—Showing the condition in life of the parents of the Cadets of the United States Military Academy from 1842 to 1863 inclusive.

TABLE B.—Showing the number of Cadets actually admitted into the United States Military Academy from each State and Territory from its origin March 16th, 1802, to October 19th, 1863.

TABLE C.—Showing the number of Cadets who have graduated at the Military Academy, from its origin to 1863, with the State and Territories where appointed.

TABLE D.—Showing the whole number of Cadets admitted and the whole number graduated from each State and Territory from 1802 to October 1863, together with the percentage of those who graduated, and of who failed, out of the whole number admitted from each State, and the number of Cadets to which each State and Territory is now entitled, according to the apportionment of members of Congress, under the Census of 1860.

STATEMENT E.—Exhibiting the conditions and examination for the Polytechnic School of France, together with reference to similar regulations for other Military Schools.

TABLES. A. B. and C., were furnished by Capt. Edward C. Boynton, Adjutant of the Military Academy, and were prepared by him originally for his "*History of West Point, and the United States Military Academy*," published by Van Nostrand, New York, 1863, 408 pages.

TABLE D.

EXHIBITING THE WHOLE NUMBER OF CADETS ADMITTED TO THE MILITARY ACADEMY FROM EACH STATE AND TERRITORY, AND THE WHOLE NUMBER GRADUATED.

STATE AND TERRITORY.	Admitted.		Graduated.			Fail'd to Graduate.		Remain.		No. entitled to.
	From	Total.	From	Total.	Per cent.	Number.	Per cent.	No.	Per ct.	
Alabama,	1817	88	1822	26	.295	61	.693	1	.012	7
Arkansas,	1827	17	1841	5	.294	.....	.705	...	....	2
California,	1850	10	1862	1	.100	6	.600	3	.300	3
Connecticut,	1802	102	1805	55	.539	43	.422	4	.039	4
Delaware,	1806	41	1808	18	.439	22	.539	1	.022	1
Florida,	1822	20	1826	6	.300	14	.700	...	....	1
Georgia,	1813	139	1815	44	.329	95	.670	...	....	3
Illinois,	1815	81	1819	30	.370	42	.519	9	.111	13
Indiana,	1812	109	1814	48	.440	52	.477	9	.083	11
Iowa,	1839	14	1843	6	.428	6	.428	2	.144	6
Kansas,	1855	3	....	.....	.....	2	.667	1	.333	1
Kentucky,	1813	196	1819	83	.423	105	.531	8	.046	9
Louisiana,	1817	67	1819	15	.223	51	.761	1	.016	4
Maine,	1808	102	1811	54	.529	43	.422	5	.049	5
Maryland,	1802	179	1802	79	.441	95	.537	5	.022	5
Massachusetts,	1802	232	1802	131	.324	91	.392	10	.043	10
Michigan,	1814	38	1823	17	.447	18	.474	3	.079	6
Minnesota,	1850	6	1859	2	.333	2	.333	2	.333	2
Mississippi,	1819	51	1823	14	.274	37	.725	...	....	5
Missouri,	1802	67	1806	24	.358	37	.552	6	.090	9
New Hampshire,	1817	78	1808	47	.602	28	.359	3	.039	3
New Jersey,	1803	101	1806	51	.504	45	.446	5	.050	5
New York,	1802	650	1803	329	.506	289	.444	32	.050	31
North Carolina,	1803	190	1805	63	.331	127	.668	...	....	8
Ohio,	1813	243	1815	118	.485	105	.432	20	.083	19
Oregon,	1854	3	1861	1	.333	1	.333	1	.333	1
Pennsylvania,	1804	424	1806	197	.464	203	.479	24	.057	24
Rhode Island,	1814	42	1817	20	.476	20	.476	2	.048	2
South Carolina,	1809	159	1806	59	.371	100	.628	...	....	6
Tennessee,	1815	178	1820	56	.314	122	.686	...	....	10
Texas,	1840	11	1853	3	.272	8	.727	...	....	2
Vermont,	1803	104	1804	75	.721	26	.250	3	.029	3
Virginia,	1802	379	1803	142	.374	237	.615	4	.011	13
West Virginia,	1863	1	....	.....	.....	.....	.....	1	1.000	1
Wisconsin,	1837	17	1848	7	.411	7	.412	3	.177	6
Dist. of Columbia,	1806	113	1811	50	.443	62	.549	1	.008	1
New Mexico,	1852	5	1861	1	.200	3	.600	1	.200	1
Utah,	1853	3	1858	1	.333	1	.333	1	.333	1
Washington,	1855	2	1861	2	.100	.....	.....	1	.500	1
Nebraska,	1858	2	1862	1	.500	.....	.....	1	1.000	1
Dakota,	1861	1	....	.....	.....	.....	.....	1	1.000	1
Colorado,	1863	1	....	.....	.....	.....	.....	1	1.000	1
Nevada,	1863	1	....	.....	.....	.....	.....	1	1.000	1
At large,	1837	330	....	139	.421	156	.473	35	.106	40
Unknown,	1803	26	....	.....	.....	.....	.....	...	....	...
Total,		4,626		2,020				210		294

The Totals in the column of Cadets admitted, graduated, and failed to graduate, for each State and Territory, and for the country at large, are obtained from Tables prepared by Capt. Boynton, in his "History of the United States Military Academy." The per centage of graduates, failures, &c., is calculated from the totals thus obtained. The minute accuracy of the results is slightly effected by the difficulty of assigning the twenty-six Cadets admitted, whose place of residence was unknown, to their respective States. The column of Cadets to which each State and Territory is entitled in the apportionment of members of Congress under the Census of 1860, is official so far as States not involved in rebellion are concerned; the latter is given according to the Census of 1850.

E.

CONDITIONS AND MODES OF ADMISSIONS TO MILITARY SCHOOLS IN EUROPE.

THE POLYTECHNIC SCHOOL OF FRANCE.

The following account of the conditions and modes of examination for entrance to the Polytechnic School, is taken from Barnard's "*Military Schools and Education, Part I., France and Prussia.*"

III. CONDITIONS AND EXAMINATIONS FOR ADMISSION.

The entrance examination is held yearly in August; the most important conditions for admission to it are always inserted in the *Moniteur* early in the year, and are—

1st. All candidates must be bachelors of science.

2nd. All candidates (unless they have served in the army) must have been as much as sixteen and not more than twenty years old on the 1st of January preceding.

3rd. Privates and non-commissioned officers of the army must be above twenty and under twenty-five years of age; must have served two years, and have certificates of good conduct.

4th. Candidates who propose to claim pecuniary assistance (a *bourse* or *demi-bourse*) must present formal proofs of their need of it.

The subjects of the entrance examination are the following:—

Arithmetic, including Vulgar and Decimal Fractions, Weights and Measures, Involution and Evolution; Simple Interest.

Geometry of Planes and Solids; application of Geometry to Surveying; Properties of Spherical Triangles.

Algebra, including Quadratic Equations with one unknown quantity, Series and Progressions in general; Binomial Theorem and its applications; Logarithms and their use; on Derived Functions; on the Theory of Equations; on Differences; application of the Theory of Differences to the Numerical Solution of Equations.

Plane and Spherical Trigonometry; Solution of Triangles; application of Trigonometry to Surveying.

Analytical Geometry, including Geometry of two dimensions; Co-ordinates; Equations of the first and second degree, with two variables; Tangents and Asymptotes; on the Ellipse, Hyperbola, and Parabola; Polar Co-ordinates; Curved Lines in general.

Geometry of three dimensions, including the Theory of Projections; Co-ordinates; the Right Line and Plane; Surfaces of the second degree; Conical and Cylindrical Surfaces.

Descriptive Geometry; Problems relative to a Point, Right Line and Plane; Tangent Planes; Intersection of Surfaces.

Mechanics; on the Movement of a Point considered geometrically; on the Effect of Forces applied to points and bodies at rest and moving; on the Mechanical Powers.

Natural Philosophy, including the Equilibrium of Liquids and Gasses; Heat;

Electricity; Magnetism; Galvanism; Electro-magnetism and Light; Cosmography.

Chemistry, the Elements; *French; German; Drawing*, and (optionally) *Latin.*

This examination is partly written and partly oral. It is not public, but conducted in the following manner:—

Five examiners are appointed by the minister of war to examine the candidates at Paris, and at the several towns named for the purpose throughout France.

Two of these examiners conduct what may be called a preliminary examination (*du premier degré*,) and the other three a second examination (*du second degré.*) The preliminary examiners precede by a few days in their journey through France those who conduct the second examination. The written compositions come before either.

The preliminary examination (*du premier degré*) is made solely for the purpose of ascertaining whether the candidates possess sufficient knowledge to warrant their being admitted to the second examination; and the second examination serves, in conjunction with the written compositions, for their classification in the order of merit.

Prior to the examination, each candidate is called upon to give in certain written sheets containing calculations, sketches, plans and drawings, executed by him at school during the year, certified and dated by the professor under whom he has studied. Care is taken to ascertain whether these are the pupils' own work, and any deception in this matter, if discovered, excludes at once from the competition of the school.

This done, the candidates are required to reply in writing to written or printed questions, and to write out French and German exercises; great care being taken to prevent copying. This written examination occupies about twenty-four hours during three and a half separate days, as shown in the following table. It usually takes place in the presence of certain official authorities, the examiners not being present.

First Sitting.	Hours.	*Second Sitting.*	Hours.
Arithmetic,	1	Algebra,	1
Geometry,	1	History, geography, and French,	3
Latin,	1		
	3		4
Third Sitting.		*Fourth Sitting.*	
Descriptive geometry, and diagram, or sketch,	4	Mechanics,	1
		Physics, chemistry, and cosmography,	2
			3

Fifth Sitting.	Hours.	*Sixth Sitting.*	Hours.
Applied analysis,	$1\frac{1}{2}$	Solution of a triangle by logarithms,	3
German exercise,	$1\frac{1}{2}$		
	3		

Seventh Sitting.

Drawing, - - - - 4 hours.

Total, - - - - - 24 hours.

Next, each candidate is examined orally for three-quarters of an hour, on two successive days, by each of the two examiners separately, and each examiner makes a note of the admissibility or non-admissibility of the candidate.

At the close of this oral examination, the notes relating to the various candidates are compared, and if the examiners differ as to the admissibility of any candidate, he is recalled, further orally examined, and his written exercises carefully referred to, both examiners being present. A final decision is then made.

The preliminary examiners then supply the others with a list of the candidates who are entitled to be admitted to the second oral examination. On this occasion each candidate is separately examined for one hour and a half by each examiner, but care is taken that in all the principal subjects of study the candidate is examined by at least two out of the three examiners.

Each examiner records his opinion of the merits of every candidate in replying, orally and in writing, by awarding him a credit varying between 0 and 20, the highest number indicating a very superior result.

This scale of merit is employed to express the value of the oral replies, written answers, or drawings. It has the following signification, and appears to be generally in use in the French military schools:—

20	denotes perfect.	8, 7, 6	denotes bad.
19, 18	" very good.	5, 4	" very bad.
17, 16, 15	" good.	3, 2, 1	" almost nothing.
14, 13, 12	" passable.	0	" nothing.
11, 10, 9	" middling		

Considerable latitude is granted to the examiner engaged in deciding upon the amount of credit to be allowed to the student, for the manner in which he replies to the various questions. He is ex

pected to bear in mind the temperament of the candidate, his confidence or timidity, as well as the difficulty of the questions, when judging of the quality of the reply, more value being given for an imperfect answer to a difficult question than for a more perfect reply to an easy one.

The reports of the examiners, together with the various documents belonging to each candidate, are sent from each town to the minister at war, who transmits them to the commandant of the Polytechnic School to make out a classified list.

Very different value of course is attached to the importance of some of the subjects, when compared with others; and the measure of the importance is represented in French examinations by what are termed *co-efficients of influence*, varying for the several subjects of study and kind of examination. The particular co-efficients of influence for each subject in these written and oral examinations, are as follows:—

	Co-efficients of Influence.	
Oral examination—analytical mathematics,	20	
" " geometrical ditto,	14	52
" " physics and mechanics,	16	
" " German language,	2	
Written compositions on mathematical subjects,	5	
" " descriptive geometry, drawing, and description,	5	
" " logarithmic calculations of a triangle,	2	
" " mechanics,	2	
" " physics or chemistry,	4	34
German exercise,	1	
French composition,	5	
Latin translation,	5	
Copy of a drawing,	5	
Total,		86

In order to make out the above mentioned classified list, the respective credits awarded by the examiners to each candidate are multiplied by the co-efficients representing the weight or importance attached to each subject; and the sum of their products furnishes a numerical result, representing the degree of merit of each candidate.

A comparison of these numerical results is then made, and a general list of all the candidates is arranged in order of merit.

This list, and the whole of the documents from which it has been drawn up, are then submitted to a jury composed of the

Commandant of the School.
The Second in Command.
The Director of Studies.
Two Members of the Board of Improvement.
The Five Examiners.

It is the special business of this jury carefully to scrutinize the whole of the candidates' documents, drawings, &c., and they further take care that a failure in any one branch of study is duly noted, as such failure is a sufficient reason for the exclusion of the candidate from the general list.

As soon as this general list has been thoroughly verified, it is submitted to the minister of war, who is empowered to add one-tenth to the number actually required for the public services; and thus it may happen that one-tenth of the pupils may annually be disappointed.

The conditions and mode of admission to the Special Military Schools, for Engineers and Artillerists at Metz,—for the Cavalry and Infantry at St. Cyr,—for the Staff at Paris, in France; and for the Engineers and Artillery at Berlin, and for the other Military Schools of Prussia, can be consulted in Barnard's "*Military Schools and Education in France and Prussia*," published by J. B. Lippincott & Co., Philadelphia, as well as in this Journal, Vol. XII.

The experience of England in the application of the principle of Competitive Examination, not only in appointments and promotions in the Military and Naval Schools, but in the East India Service, and the Civil Service generally, will be presented in the next Number, or Volume of this Journal.

Continued from page 64—

II. ALDEN PARTRIDGE.

NOTE.

As an Appendix to our Memoir of Capt. Alden Partridge, we republish the following Memorial by him to the Congress of the United States, not because we approve the objects or the arguments of either document, but as part of the educational history of the country.

MEMORIAL OF ALDEN PARTRIDGE,

Relating to the Military Academy at West Point, and praying that young men educated at other military schools may have an equal chance for admission to the army as those young men have who are educated at West Point. January 21, 1841. *Referred to the Committee on Military Affairs.*

To the Honorable Congress of the United States:—The memorial of Alden Partridge, President of the Norwich University, at Norwich, State of Vermont, respectfully showeth:

That your memorialist holds it to be a cardinal principle of our republican institutions, that stations of honor, trust, and emolument should be equally open to all our citizens, to which all have an equal right to aspire, and from which none can constitutionally be excluded by any law, rule, or regulation whatever. Your memorialist has, however, witnessed, with deep regret, a direct violation of this vital principle of our constitution, by the rules and regulations adopted for the organization and government of the Military Academy at West Point. The cadets of that institution, all of whom are educated at the *public* expense, have, for many years, *monopolized* nearly, if not quite, all of the stations of honor, trust, and emolument, above that of a non-commissioned officer, in the military establishment of the United States, to the utter exclusion of those who are equally well qualified, equally meritorious, and who are educated at their *own* expense. But, in order to place this subject more clearly before your honorable body, your memorialist would call your attention to the law of the 29th of April, 1812, entitled, "An act making further provision for the corps of engineers." By the provisions of this act, no candidate can be admitted into the Military Academy who is under fourteen, or over twenty-one, years of age. The effect of this provision is to exclude every young man in the United States who is above twenty-one years of age from the appointment of cadet, while the rules of the War department require that none except those educated at this academy can be commissioned in the army of the United States. The effect, then, of the law and regulation is to utterly exclude all the youth of our country, except such select few as the President may think proper to place in this "public charity school," from the military service of their country, who are above twenty-one years of age, unless they will enter in the humble capacity of *privates* or *non-commissioned officers.* And can such a system be in accordance with the principles of our constitution? Your memorialist believes not. On

the contrary, he feels confident in the assertion that it is a most flagrant and palpable violation of them. The direct and certain effect of this institution is to extend *Executive patronage;* for the President has the entire selection of the *chosen two hundred* and *fifty* who are to be placed in the institution, and also to establish an *aristocracy* of the most dangerous kind, viz.: a *military* aristocracy in the United States. What, your memorialist would ask, is an aristocracy? Is it not where any particular class in a State claims and exercises privileges of which the great body of the people are deprived? And do not the cadets at West Point enjoy such privileges? and if so, do they not constitute an aristocracy? Your memorialist believes that neither the fact nor the inference can be controverted. But your memorialist will go further, and aver that the regulations at West Point have not only constituted an aristocracy in the United States, but that this aristocracy has already become, in a great degree, *hereditary.* How many individuals, your memoralist would ask, who have held offices of honor, trust, or emolument, under the Government, for the last twenty-five years, have had their sons, brothers, nephews, or other relatives, educated at the public expense at West Point, to the entire exclusion of those who (to say the least,) were equally meritorious, and equally capable of rendering service to the republic? And how many of those thus educated have ever rendered any service whatever? A reference to the rolls of the institution will answer these inquiries. Your memorialist has *personal* knowledge of many instances. Your memorialist is well aware that it has been attempted, by the friends of this monstrous invasion of the rights of the people, to cast around it the mantle of Mr. Jefferson. Your memorialist is ready to grant that the institution was established during the early part of the first term of Mr. Jefferson's administration; but denies that any inference can be drawn from that circumstance to sustain the present system. The institution *then* consisted only of the corps of engineers, which was limited to sixteen officers and four cadets, without any of those exclusive privileges which have since been conferred upon it. On the 29th of April, 1812, (just previous to the declaration of war,) a law was, however, passed, entitled "An act making further provision for the corps of engineers;" by the provisions of which, the whole number of cadets, whether of infantry, artillery, or riflemen, was not to exceed two hundred and fifty; and the President to appoint a limited number of cadets, and conferring on him a *discretionary* power to attach them to the Military Academy, was evidently induced by the certainty of immediate war with Great Britain, and had a direct reference to a *war* establishment. Your memorialist would respectfully call the attention of your honorable body particularly to the provisions of the law of 1812 just referred to; and, if he does not much mistake, it will satisfactorily appear that the President is not *required*, but simply authorized, to appoint a single cadet; and that it is left entirely discretionary with him, after they are appointed, to attach them to the Military Academy, or to attach them to their respective companies, agreeably to the provisions of other laws then in existence. And here your memorialist would observe that, in the *peace*-establishment of the army previous to the late war, two cadets were allowed to each company of artillery, light infantry, and infantry, amounting, in the total, to a *larger* number than was authorized by the law of 1812. But neither President Jefferson, nor President Madison considered that the law required of them to fill those vacancies so long as they considered their services were not required: and they con-

sequently did not fill them. The largest number of cadets ever in service at the same time, previous to the late war, did not exceed forty, and seldom exceeded twenty-five. Do the necessities of the country require that any larger number should be retained in service now, than were deemed necessary by Presidents Jefferson and Madison during a time of peace? Your memorialist believes not. But it is urged, in favor of this academy, that it presents a most favorable opportunity for the education of meritorious young men who are poor, and, consequently, unable to educate themselves. Your memorialist, however, has yet to learn by what *constitutional* authority Congress is empowered to appropriate any portion of the public revenue for the support of a *national charity school* for the education of the poor. Besides, if this power did exist, (which your memorialist presumes no reasonable person will contend does,) *all* the poor in the United States have an equal right to the benefits to be derived from its exercise, and that, consequently, the institution at West Point is on quite too limited a plan for the accomplishment of the contemplated object. Either, then, the institution should be very much enlarged, or several others established in different parts of the United States, which would be far more convenient for the great body of the poor. If, however, the rolls of this institution for the last twenty years be examined, it will be found that many more of the *rich* and *influential* have been educated there, than of the *poor*. Poverty, however meritorious the subject of it may be, is but a sorry recommendation for admission to this aristocratic establishment.

But it is further urged, that this institution is *necessary* for the education of the officers of the army; and that, were it abolished, the candidates for commissions would not be properly qualified for the discharge of their duties as officers. Before your memorialist proceeds to exaime the truth of this position, he would inquire, at what institution, and at whose expense, Generals Washington, Greene, Knox, Putnam, Lincoln, Sullivan, Morgan, Wayne, Sumter, Pickens, Marion, and all the other officers of the revolutionary army, by whose valor, skill, and patriotic exertions, these United States now constitute a free and independent nation, received their education? The answer is ready: at the ordinary institutions of the country, and at their *own* expense; just as every *American citizen* should be educated. And have the *proteges* of the West Point Academy, on whose education so many millions of dollars of the peoples' money have been expended within the last twenty years, exhibited more skill, more valor, or more patriotism, than did the officers of the revolutionary army? Let the events of the Florida war, as compared with those of the Revolution, answer the question. The truth is, (and it can not be much longer concealed from the view of the people, by the reports of *boards of visitors*,) that the whole system of education at West Point is well calculated to form *military pedants* and *military dandies*, but will never form *efficient soldiers*. Much more important to them is their attention to the *cut* of the *coat*, the placing of a *button*, and the *snowy whiteness of gloves and pantaloons*, than to those *physical* and *moral qualities* which are absolutely necessary to the correct and efficient discharge of the active duties of the field.

But your memorialist denies the truth of the position, that the West Point Academy is necessary for the education of young men for the army. There are other institutions where military science and instruction constitute a branch of education for the pupils. Of these institutions, however, your memorialist will

particularize but one—and that is the Norwich University, at Norwich, Vermont, over which he has the honor to preside. This institution was incorporated by the Legislature of Vermont, in November, 1834, with full power to confer diplomas, &c. By the act of incorporation, military science is made a part of the education of all the pupils. They are consequently correctly and thoroughly instructed in the theoretical part of military science, and also in the *practical* duties of the soldier, and every one who graduates at this institution is well qualified to discharge the duties of a company officer (and even, if necessary, to command a battalion) in any corps of the army. In order further to prepare them to discharge the more hardy and active duties of the soldier, they occasionally perform military marches. In the month of July, 1840, they performed a march, under the personal command of your memorialist, to the celebrated *military post* of Ticonderoga, carrying their arms, accoutrements, knapsacks, &c.; the whole length of which was one hundred and sixty-five miles. Of this distance, one hundred and forty miles was on foot, and twenty-five miles by steamboat. The march on foot was performed in a little more than five days, crossing the Green Mountain range twice, and the ground, with the heavens for covering, constituted their only resting-place at night. The weather, during the whole march, was hot; and they were enveloped in a cloud of dust, occasioned by the severe drought, nearly the whole distance. They all returned in excellent health and spirits. The youngest member of the corps was thirteen years of age. The other branches of literature and science are attended to as extensively, and the latter much more practically, than at any other institution in the United States; and the students are consequently equally well qualified to discharge their duties in the *cabinet* and in the *field*. But notwithstanding the members of this institution are, to say the least, as well qualified for commissions of any grade, and in any corps of the army, as those of any other institution in the country, and have also obtained the necessary qualifications at their own expense, they are virtually excluded therefrom by the *arbitrary* and *monopolizing* regulations (established without the least sanction of law,) of the Military Academy at West Point. In the month of September, 1840, a member of the Norwich University, the son of a highly respectable gentleman in the city of New York, well recommended, applied to the Secretary of War for a commission in the army, but was informed that there were *no vacancies*, and that the cadets from West Point were *more than sufficient to fill all the vacancies*. On the 21st of December, 1840, your memorialist wrote to the Secretary of War, recommending three young gentlemen, members of the Norwich University, for commissions in the army of the United States; and received an answer, dated War Department, December 29, 1840, from which the following is an extract: "I acknowledge the receipt of your letter of the 21st instant, recommending Messrs. Morris, Stevens, and Dorne, for appointments in the army; and I have here to inform you, in reply, that there being no vacancies at present, the application will be filed for consideration, when any occur, *to which they can be appointed.*" Now your memorialist feels confident that the records of the War Department will show that a large number of cadets at West Point are commissioned every year; and he presumes that such will continue to be the case, unless a radical change is effected. But when young gentlemen of equal respectability and attainments, who have not been of the *favored few* whom *Executive favor* has admitted into this nursery of aristocracy, to be edu-

cated at the expense of the honest working men of the country, become applicants, their claims are entirely set aside. Against this *unconstitutional*, *unequal*, and *monopolizing* practice, your memorialist deems it his duty respectfully, but most decidedly, to protest; and to ask of your honorable body the establishment of some rule whereby the members of the Norwich University, at least, (to whom, in many respects, he stands in the relation of guardian,) may be restored to their *constitutional rights;* that when they become applicants for stations of honor, trust, or emolument, in the military service of their country, they shall stand on terms of equality with the cadets at West Point.

Your memorialist deems it proper here to remark, that in October, 1840, he addressed a communication to the President of the United States, on this subject, requesting to be informed whether, in the opinion of the President, he possessed the power to remedy the grievance of which your memorialist complains; and, if so, whether such power would be exercised for that purpose. To this communication no answer has been received. Your memorialist, availing himself of the privileges granted to every American citizen, by the first amendment of the constitution of the United States, would beg leave to call the attention of your honorable body to some subjects, which he considers grievances of a high order, and respectfully but earnestly solicits that they may be redressed, viz:

1st. Your memorialist considers the Military Academy at West Point a grievance. Under its present organization, it is unconstitutional, calculated to foster a military aristocracy in the country; calculated to depress the militia, (our only constitutional defense,) by engrossing all the patronage of government; and is entirely unnecessary, as military science can be attained at other institutions, from which the necessary officers for the army can be supplied without any tax on the people. Your memorialist, therefore, asks that this institution may be abolished, and that the money that is annually appropriated for its support may be applied to aid in disciplining the militia, and disseminating military information amongst the people, who are its constitutional and safe depositories.

2nd. Your memorialist considers the Board of Visitors that annually assemble at West Point a grievance. This board never had any *existence whatever in law*, but was established by Executive usurpation; yet, to pay the expense of this illegal board, your memorialist believes that more than fifty thousand dollars has been drawn from the public treasury. Your memorialist earnestly solicits that this appropriation, the making of which is a direct sanction to Executive *usurpation*, should be discontinued.

3rd. Your memorialist considers the removal of the head-quarters of the corps of engineers from West Point to Washington a grievance, because it is a direct violation of the law of the 16th of March, 1802, establishing that corps. That law requires the commandant of engineers to reside at West Point, unless ordered, by the President of the United States, on duty at some other place in the line of his profession; and, when at West Point, the law makes him superintendent of the Military Academy; and when he is absent, the next in rank (who is then present,) is made the *legal* superintendent. The appointment, therefore, of any particular officer as permanent superintendent, is evidently illegal, as the law has clearly specified who the superintendent shall be.

All of which is respectfully submitted,

A. PARTRIDGE,

JANUARY, 13, 1841. *President of Norwich University.*

REMARKS BY THE EDITOR.

We publish the foregoing Memorial of Capt. Partridge, asking Congress to redress "the grievance" of the Military Academy, not because we have the slightest sympathy with the object or main arguments of the memorialist, but as specimens of the opinions held and propagated by a graduate, professor, and superintendent of the Academy, who did more than any other individual to introduce military instruction and exercises in schools not national or professionally military. We can not, however, put it forth without accompanying it with a few brief remarks.

To Capt. Partridge, more than to any one man, and to his pupils, and personal friends, as we believe, is due the popular objections which prevail respecting the United States Milltary Academy, except so far as the objections spring from the abuse of the mode of apppointing Cadets. For nearly twenty years Capt. Partridge was never known to express any doubt of the constitutionality or usefulness of this institution. His objections first took shape and utterance when he was superceded in the superintendence by Colonel Sylvanus Thayer. Of the circumstances and results of his removal, and of the appointment of Col. Thayer, and the subsequent reorganization of the Academy, something has already been said in the History of West Point, in this volume, (p. 17–48,) and more will be said when we come to speak of the labors of Col. Thayer.

So far as these objections are directed to the constitutionality of the laws for establishing the Cadet Corps, as distinct from any other Corps of the army, or against training officers collected together and organized as a school, we think them preëminently frivolous. If any friend of the Academy would assure his doubtful faith in its constitutionality, let him read Capt. Partridge's Memorial, asking the same Congress to establish a system of National Education, which he petitions to redress the grievance of a special school, that every civilized government holds to be indispensable to the right organization of its armies.

So far as these objections are aimed at the mode of appointment and promotion,—confining both to the patronage of one man in the country, or one man in a Congressional District, acting in either case without personal examination of the party to be admitted or promoted, and excluding others, it may be, better qualified,—we hold them to be valid. A more disgraceful record of failures, where an opportunity of selecting the most meritorious candidates existed, can not be shown.

While we believe that candidates are too often recommended and nominated to the appointing power, from family and party considerations, we have seen no reason to believe that the social condition or occupation of parents has influenced the appointments. On the other hand, the records of the Academy, as made out in this particular by the Cadets themselves, exhibit a fair representation from all classes and occupations of society.

According to an official Statement, prepared by Capt. Boynton, and published in his History of the Academy, of 1,824 cadets admitted from 1842 to 1863 inclusive, the fathers of 1,300 were farmers or planters; of 681, were lawyers; of 672, were merchants; of 377, were mechanics; of 69, were physicians; of 256, were in the civil service; of 116, were clergymen; of 467, were in the army or navy; of 572, were editors, masters of vessels, &c. Of the whole number, 1,136 were orphans, 1,585 were in moderate, 534 in reduced, 62 in indigent, and 324 in independent circumstances. We shall publish the Statement in our next Number.

III. MILITARY SYSTEM AND MILITARY INSTRUCTION IN SWITZERLAND.

[Extract from "A Plan for Military Education in Massachusetts." By E. Dwight.]

1. OUTLINE OF MILITARY SYSTEM.

In the year 1847 seven of the cantons of the Swiss Republic seceded from the Confederacy. Among them were the three forest cantons, the original nucleus around which the whole Republic had been formed, the birth-place of William Tell and Arnold, of Winkelreid. The seceders held the strongest military position in Europe, but the loyal cantons put on foot an army of 100,000 men, well armed, drilled, and officered. The city of Friburg was taken, and in thirty days from the first proclamation of the commanding general the war was ended and order was restored.

In 1856, a quarrel having arisen with the king of Prussia, Switzerland placed on foot an army of 200,000 men well provided with artillery Thus the military system of Switzerland has proved itself effective; and as there is no standing army whatever, and the state is a confederacy of cantons under democratic forms of government, we may find something in their system applicable to our own case.

Switzerland covers an area of about 15,000 square miles, equal to that of Vermont and New Hampshire together, of which a large portion is covered by lakes, forests, mountains, ice and snow, leaving only thirty-one per cent of the land fit for agricultural purposes, not including the mountain pastures. Possessing a population of only two millions and a half of people, it is surrounded by military powers of the first class, and must needs be strong to be free. France, Austria, and Prussia are not always as good friends as they are near neighbors, and the little Republic must ever be ready to ward a blow and return it. The constitution of Switzerland declares that every citizen is a soldier. "Tout Suisse est soldat." Military service is required between the ages of twenty and forty-four. The substitution of one man for another is forbidden, but exemption from service is allowed to certain persons, such as officers of the government and of public institutions, clergymen, students of theology, members of the police, pilots and others. In some cases a man is excused from the more active service, but required to pass through the regular course of mil-

itary instruction and to serve in the reserve of the army when called upon. Such are the only son, or one of the sons, of a widow; or of a widower, provided the father be over sixty years old, and the son necessary to his support; a widower, the father of children in their minority, who has no resources except the work of his own hands; one of two or more sons when they make common household with their parents, if the family could not be supported by other brothers not subject to service; married men, or widowers having at least two children. These exceptions do not apply to officers.

The Council of State of each canton appoints yearly a "Commission on Furlough and Discharge," consisting of ten members, of whom two are medical men, two officers, one a corporal, one a soldier, and the others members of the council. The commission acts under oath; grants exemption for physical defects or want of height; or passes men from the active service to the reserve. A man who at the age of twenty has not attained the height of five feet and one inch can be furloughed for two years; and if, at the end of the third year, he has not reached this height, discharged from all service. Men who have been convicted of disgraceful crimes, or have suffered penal sentence, are declared unworthy of bearing arms; and if once deprived of their civil rights can not hold a commission.

The militia is divided into the federal contingent and the landwehr. The federal contingent consists—*First*, of the elite, which includes three per cent of the whole population, taken from those between the ages of twenty and thirty-four. The time of service in the elite is eight years. *Second*, the reserve, being one and a half per cent of the population and not above the age of forty. The landwehr includes men up to the age of forty-four. The landsturm, or *levy en masse*, consists of the whole male population, capable of bearing arms, between the ages of twenty and fifty, and not included in the classes before described. The male population of Switzerland is 1,140,000, of which thirty-seven per cent, or 422,000, are between twenty and forty-four years of age. One-fourth of these are exempt or found unfit for service, leaving 316,000 perfectly fit. In 1853 the number of men required for the federal contingent was 104,354,* but according to official statements the number of men in all branches of the service, well armed and instructed, amounted to 125,126. The excess of men supplied, over those required, arose from the public spirit and general desire for military instruction existing among the people. Add to these 125,000 the landwehr, which numbered 150,000, and we have a total of 275,000 effective men, well armed, drilled, and officered.

* Infantry, including Rifles, 89,366; Artillery, 10,366; Cavalry, 2,869; Engineers, 1,530.

The federal army is composed of the following arms: engineers, including sappers and pontoniers; artillery, including rocket batteries; cavalry, riflemen, light infantry, and infantry. There is besides a medical corps for the service of the ambulances and hospitals. But as uninstructed men are of little or no value, the federal law upon military organization provides that the cantons shall see to it that the infantry of their contingent is completely instructed according to the federal rules, and though the application of this principle in its details is left to each canton, yet the following rules are laid down: recruits are not received into the federal elite until they have gone through a complete course of instruction which lasts at least twenty-eight days for infantry, and thirty-five days for light infantry. The confederation charges itself with the instruction of the engineers, artillery, cavalry, and riflemen. This course lasts twenty-eight days for riflemen and forty-two days for the three other arms, but these recruits have previously been drilled in the school of the soldier by their cantons, and the riflemen have received preparatory instruction in firing at a mark.

In the larger cantons—that of Zurich for instance—divisions of recruits in succession are put into barracks and well drilled practically and theoretically for fifty-six days, either consecutively or at two periods of the same year, as may best suit the youths. In the second year after entering the elite, and for each year afterwards, the infantry is called out for drill during three days, by half battalions at least, with preparatory drill of three days for the "cadres,"* the commissioned and non-commissioned officers forming skeleton corps. Days of entry into service are not counted as days of drill, and in case of interruption the days of drill are increased by two days. The reserve is called out for drill during two days of each year, with a preparatory drill of one day for the "cadres."

In the corps of engineers, artillery, cavalry, and riflemen, the elite is called out every alternate year for the engineers and artillery, and every year for the cavalry and rifles. The drill lasts four days for the "cadre of engineers and artillery, and immediately after ten days for the cadres and companies united, or twelve days for both together. For the cavalry the drill lasts seven days for dragoons and four days for "guides;" for riflemen, two days for the cadres, and immediately afterwards four days for cadres and companies united. The reserve is called out for a drill of half the length of that of the elite.

To complete the instruction of the soldier the cantons in their turn send their men yearly to the federal camps where the troops to the

* The officers, non-commissioned officers, and corporals, constitute what is called the "cadre."

number of three or four thousand, are kept under canvas for two weeks. Larger numbers of men, forming bodies of 5,000 and upwards, are also mustered and cantoned in the villages, and during several days exercised in the grand movements and manœuvres of war, chiefly for the instruction of commanders and officers of the staff.

To keep up the efficiency of every department of the service the whole is subjected to the yearly inspection of colonels of the federal staff appointed by the central government. The inspection of infantry is confided to ten colonels who serve for three years. There is also an inspector in each of the arms of engineers and artillery, the latter having under his direction an administrator of materiel charged with the inspection and surveillance of all the materiel of the confederation. This administrator directs and superintends the workmen employed in the factories of the confederation for the manufacture of powder and percussion caps, as well as arms, gun-carriages, &c. The colonel of cavalry and the colonel of rifles direct all that relates to their respective arms, and recommend the necessary improvements. If these inspectors detect in the contingent of any canton any want of perfection in drill, they have the power to order such additional drill as may bring the men up to the proper standard.

Great care is taken in the instruction and selection of officers. The officers of infantry, up to the grade of major, are appointed by the cantonal authorities; the higher officers by the federal government. But no officers can be appointed to the special arms of engineers, artillery, and cavalry, except such as have gone through a course of instruction at a military school appropriate to each arm. No one can become a non-commissioned officer who has not served at least one year as a soldier, nor a commissioned officer except after two years' service. Candidates for promotion must pass a public examination, before a commission, both in theoretical and practical knowledge. Promotion is given, according to seniority, up to the grade of first lieutenant. Captains are chosen from among the lieutenants without regard to seniority. To be appointed major, eight years' service as an officer is required, of which, at least, two years as captain. For a lieutenant-colonel, ten years' service as officer, of which, at least, four as major of the special arm. For a colonel, twelve years' service as an officer is required, of which, at least, four years as "commandant," or in a higher grade. In the Swiss service there is no higher rank than that of colonel. When a colonel has been appointed commander-in-chief of the army, he receives for the time being, the title of general, which he afterwards retains by courtesy.

We are indebted to Professor L. Simonson, of Trinity College, Hartford, Conn., for the following communication respecting the cadet system in schools not specially military and the practice of target shooting in Switzerland, by which a military spirit is fostered throughout the entire population and the highest skill in the use of the rifle is attained by a large number of individuals, who are thus prepared for any sudden call to arms.

2. THE CADET SYSTEM.

The Swiss boy learns target shooting and practices gymnastic and military exercises at a very early age. He imbibes with his mother's milk the thought that his first duty is to become a defender of his country.

These boy-soldiers are styled *Cadets*, and are a fruit that can spring up and ripen on democratic soil only. The first armed corps of the kind we find in Berne near the end of the 16th century. But the general practice of military exercises among them dates back only about eighty years, when the HELVETIC MILITARY ASSOCIATION began to advocate the formation of *Corps de Cadets* in all parts of Switzerland. From that time the most efficient and eminent officers devoted themselves enthusiastically to this cause. The first corps sprang up in Aarau, Sursen and Olten. Aarau possessed for a long time the best drilled, largest and finest corps, and in the canton of Argovia generally the system has struck deeper root than elsewhere; but well drilled corps can be found in any of the larger places, as in Zofingen, Lenzburg, Brugg, Baden, and a dozen other places. It was an old custom for the cadets to parade in the federal cities—Zurich, Berne and Lucerne—in honor of the assembling of the Swiss Diet, (Tagsatzung.) As far back as 1770 we find a boy-corps of infantry and artillery in Zurich, yet towards the end of the last century the organization was partially broken up, until the political renovation of the canton in 1830 re-organized the corps anew. Besides in the capital, we find corps in Winterthur, Uster, Wald, Stäfa, Meilen, Horgen, Wädenswyl, and other towns on the lake shores. Berne, Biel, Thun, Burgdorf, and many other Bernese villages, for thirty or forty years have practiced their school-boys in the exercise of arms. The state takes special care to give the students of the University of Berne and of the two normal schools a thorough military training. The cantons of Lucerne, Solothurn, Basle, Schaffhausen, St. Gall, Appenzell, Glarus, Tessin, Friburg, Neufchâtel, and the countries of Vaud and of the Grisons, possess each of them one or more cadet-corps. Military drill, as well as gymnastic exercises, forms part of the regular

school routine of all middle and higher schools of the above-named cantons. Provision is now made to extend this discipline over all schools, making it obligatory on every pupil who is not disabled by bodily defects. Military practice commences at the age of eleven and is continued to the age of eighteen or nineteen. Federal or cantonal officers and instructors drill the youth two afternoons in the week, the more advanced only once a week. The youth thus disciplined, learn not only to obey but also to command. The officers of every corps are promoted from the rank and file, and in this manner are excellently fitted to become afterwards officers in the federal army. All cadets when they are enrolled at a later period into the militia, are by law exempted from drill. The arms are furnished by the state or community; the uniform, which the pupil may wear in or out of service, must be procured by himself.

Most of the cadet-corps consist of infantry, (sharp-shooters and musketeers;) many have, however, artillery also, as in Zurich, their guns throwing balls of two and four pounds weight. In Argovia and some other cantons there are even grenadiers and sappers. Cavalry exist in theory only. A gun with bayonet and cartridge-box, here and there also a knapsack and sword form the equipment of the foot-soldier. The uniforms are various and fanciful. The Zurich Cadets distinguish themselves by their simple and tasteful appearance; they wear a dark blue coat with white metal buttons, grey pants, and dark blue cap with the cockade. Every corps has one or more smaller or larger flags. Many cantons have excellent bands of music; others, as Zurich, have only drummers and their indispensable drum-major, and sing martial songs while marching.

It is a universal custom to close the school year in autumn by a festival, the shining point of which is the military parade and field manœuvre. The Swiss juvenile festivals have gained quite a reputation at home and abroad. In the Argovian communities all the school children, the females as well as males, festively adorned, participate. The corps of the whole canton and even of several cantons are often united in the field manœuvre; on such an occasion the enthusiasm and emulation of youth reach the highest pitch. Thus the Bernese Cadet Corps in 1821 had a common drill parade in the neighborhood of the capital, and many others have since come off. In 1816 about 1,000 Argovians went into camp at Lenzburg, and all of them will joyfully remember this merry festival. A still greater notoriety was gained by the hot sham fights at Wettingen, which came off in 1821, and in which the Argovian, Zurich and Winterthur cadets operated together.

Two brigades consisting of 1,560 men, all told, with seven cannon fought there for the positions between Wettingen and Baden; the most glorious affair of the day was the heroic defense and final storming of the Wettingen bridge. Yet all other manœuvres of that sort have been thrown into shadow by the great Swiss cadet feast in September, 1856. It will not be forgotten by the thousands, who participated either as actors or spectators, even if there should be at some future day a re-union of all the corps of Switzerland. Ten cantons participated in that festival. Argovia furnished 974 men; Zurich, 805; St. Gall, 472; Schaffhausen, 186; the Grisons, 166; Ausserrhoden, 155; Lucerne, 148; Thurgovia, 111; Glarus, 60; and Tessin even sent over the St. Gothard a contingent of eighty-four. Thus 3,161 young heroes, in various but generally tasteful uniforms, with bands of music, one hundred and twenty-four drums, numerous banners, and ten cannon, entered the festively-adorned Zurich from all sides. Divided into two little armies drawn up in battle array between Oerlicon and Schwamendingen, they fought over the celebrated battle of June 4th, 1799, in which the French under Massena, were defeated by the Austrians under Archduke Charles.

The youths in Zurich as well as in other cantons, have no reason to complain that their physical development is neglected in favor of the mental; nay, we might rather fear that the first is at times too much exaggerated, considering the tender age of the majority of the boys. The pupils of the canton Gymnasium and Industrial School, many of whom are foreigners, Germans especially, practice gymnastic exercises throughout the whole year; the military drill is limited to the summer course only. In the month of August, from time immemorial, the boys, all and every one, practice target-shooting. The smaller boys only are allowed to rest the gun on the stand; the older must shoot without any support whatever. The cities and individuals furnish prizes for those who hit the centre of the target. In September the cadets—the infantry as well as artillery—hold their target-shooting; in October they drill in the field, ("Vorkämpfli,") and then comes off the annual School Festival with its gymnastic exercises and the combined manœuvre in field.

At the sham fight on the 1st of October, 1860, the enemy as usual existed in fancy only; they fired, however, as if he were flesh and blood. They had the task of pursuing the imaginary foe from Windicon to the Hückler. The division marched over the covered bridge at Aussersihl, detached then a column to the woody heights in order to outflank the enemy, while the principal body marched along the

Sihl and drove the enemy from the clearings into the thick woods. Both divisions re-united at the Höckler Bridge and marched to the great "Wollishofer Allmend," where they practiced firing. This is a beautiful spot for the deployment of troops; the sound of every shot is returned in manifold echoes from the surrounding heights. The Zurich and federal troops also encamp, practice, and shoot on this "Allmend."

The annual festival of the canton school came off on the day for gymnastic and military exercises. The printed programme distributed among the pupils contains the order of exercises, the plan of the manœuvre, and some useful hints in large type, as, "Clear the road"—"Smoking is prohibited to the pupils during the festival"—"Not too fast"—"Do not forget the ramrod"—"Always 120 paces distance." At 6 o'clock, A. M., the drummers beat the reveille, proceeding from the guard-house in three different directions. If the weather is unfavorable, the reveille is not beaten, the school begins at the usual hour, and the next fair day is chosen for the feast. The beaming sun dispersed, however, on this occasion, the autumnal morning mists, and universal joy beamed from all faces. On the first day the public gymnastic exercises came off; and after supper the decisions of the umpires were proclaimed and prizes distributed.

The second day the whole corps, numbering about five hundred, hastens at 7 o'clock, armed and equipped, to the barracks, and marches from there to the open space near the railroad station, where from 8 to 10, Colonel Ziegler, the Secretary of War, accompanied by members of the Board of Supervisors, is occupied with the general inspection of "his young comrades." At $12\frac{1}{2}$ the corps assembles again near the barracks, where they receive their ammunition, and at 1 o'clock they turn out to the manœuvre. The corps is divided into two small armies, each of which consists of a centre, right and left wings, and a reserve. The enemy under the command of Lieutenant-colonel Von Escher, marches over Riesbach and Zollicon into his position. The federal troops under Commandant Nadler, take their way over Hirslanden and the Balgrist. The left wing of the enemy, meanwhile, had taken possession of the heights above the Zollicon, and his main body is marching on the right bank of the lake upon Zurich. The enemy makes a halt, and receives the report of his scouts, that the "Burghölzli" and the heights of the Balgrist have been taken possession of by the federal army for the purpose of impeding the further advance of the hostile troops over Hirslanden. The federals at 3 o'clock attack the enemy in his position on the mountain, but they

are beaten back, notwithstanding their heroic endeavors, and are compelled to retreat since the enemy changes his defensive position into a general charge. The federals retire in good order, and the enemy purchases every inch of ground at a great sacrifice. Though he succeeds in cutting off a side column, his losses must be great until he can silence the murderous fire of the federal battery which has taken a very favorable position on the "Oberrieder Heights," and after having done so he advances to the lowlands.

The fight offers many a picturesque scene. Nowhere such a diversified, broken battle-ground can be found as in the Swiss fore-lands. Especially in the neighborhood of Zurich one is at a loss which to choose. There are every where covers and ambuscades for riflemen; the infantry find numerous advantageous positions, and many heights easily accessible which command vales and plains are at the command of the artillery. The leaders have hard work to restrain the ardor of the boy-soldiers, especially of those in the broken chain of the sharp-shooters. Finally the signal shot is fired, followed immediately by many others. It is a real feast to observe how the skirmishers, while running from one cover to the other, crouch together as much as possible; how skillfully they take advantage of every little mound, and how they endeavor in their attack to avail themselves of every protection. This or that one seems a perfect little Zouave; some even show the disposition of a Turcos. One loads his rifle lying flat on his back, another springs forward like a tiger. To be commanded to the chain of the skirmishers is considered special good fortune, for there the individual is something by himself, can move at will, and is supplied with plenty of ammunition. Yet, the main body also of the army, which is obliged to fight in closed lines and strict order, is allowed to vent its fury in firing by single files and by battalions in thundering vollies. At the command to fire a hundred muskets at once, but a single peal as of thunder is heard, and the smoke of the powder fills the air with the sweetest of savors. For a change we turn to the artillery. Though they do not possess any rifled cannon, they are nevertheless intent upon aiming their guns accurately, and the little self-possessed gunners who serve the pieces would prove dangerous adversaries to any foe. They mount and dismount a piece as quickly as any trained artillery-man, and where the ground offers great impediments, one can see the stronger boys carrying their own pieces.

The "Father of the Cadets," Colonel Ziegler, is present at the sham fights as an impartial umpire, walking continually on the battle-

field, and smiling as one or the other section makes a good hit. As soon as the retreating federal troops have gained a favorable position, they stop short, concentrate their forces, and brave any further advance of the enemy who, after he has made some further unsuccessful attempts, is convinced that the federals are a match for him, and even stronger than himself, makes a halt, and the battle ends. The white cross in the red field (the federal banner) remains, of course always master of the field.

Many a manœuvre has ended without any accident, yet sometimes a hot-blooded cadet forgets the ramrod, and wounds a soldier from the hostile lines or a spectator, for the people mingle without fear among the combatants. Every Swiss is a soldier, and the crack of the guns is a congenial sound to him. The European diplomatists who met in Zurich in the Fall of 1860 for the settlement of the peace of Villafranca, were all present at the manœuvres, and undoubtedly depicted the cadet system to their respective governments in glowing colors, recommending the general adoption of the system. We now ask our governors and our people in general—"Shall we be the last?" A noble ardor may accomplish a good deal, yet *strength* combined with will can accomplish far more—almost every thing.

After the parties have fought an hour and a half in the sight of the Alps and the glittering lake, and rested a little while, they march in brotherly union with glowing faces, to the sound of the drum, or singing patriotic songs, from the heights down to the shore road, enter Tiefbrunnen, and stack their arms in pyramids on the green sward of its hospitable pleasure-grounds. Then after the labor and heat of the day, the young soldiers hasten at double-quick step, and with Goliath-like appetite, to the garden of the neighboring inn, which stands on the shore of the beautiful lake, and give fearful battle to a second enemy in the form of loaves, sausages, etc.; the blood of the grape runs like water, and so indefatigable are they in continually repeated onslaughts, that in a short time the forces of the enemy have wholly disappeared. The state bears the expenses, in order that the poorest boy may be that day as rich as his upper-ten comrade. Shouts and hurras spice the good things still more. Meanwhile it has grown dark, the cadets take to their arms again, and by the light of numerous torches, Colonel Ziegler proclaims and distributes the prizes. The name of every victor is received with the beat of the drum and thousands of hurras. The results of the target shooting in 1860 were not so satisfactory as in former years. The artillery gained 65 prizes in one hundred shots, the foot 28; while in 1859 the former received 86,

and the latter 33, in the average of all distances. The first two prizes were again taken by Glarus boys. This little people, renowned through its marksmen, has for the last seven years monopolized the first prizes.

Finally the warlike band marches home and the officers and instructors meet again at a social supper, which lasts until after midnight. Thus ends the manœuvre of Swiss boys.

The Swiss militia system may be our model. It will insure our internal peace and national independence. It will unite the citizens of all states into one band of brothers. Every people rears troublesome individuals. Switzerland had to contend with internal difficulties, factions, etc., as we have now, but the majesty of the law was upheld by the masses, and while the rebels were beaten in the field, the people of the different sections met again in friendship. And so, we trust, it will be with us. The day may not be distant when we shall want the strength of our whole beloved Union to maintain our position among the great nations of the earth. United we need not fear the world in arms.

The Swiss are the most peaceable and industrious people, and at the same time the most warlike and ever-ready. In the idea of the Swiss, the citizen is inseparable from the soldier, lest the free man should become the slave of a domestic or foreign tyrant. The first advantage of this idea is, that Switzerland has not a standing army, and yet it can call into the field at any moment 200,000 well trained men in the flower of their age; a like number could be raised of younger men under twenty-one and above forty-five. 200,000 men is eight per cent of its population, according to which we could have about 2,200,000 citizen soldiers, not on paper only, but real soldiers. If we institute the cadet system the next generation will be a warlike one, and no American will even think of making a law, exempting the citizen from his first duty to appear in person for the defense of his liberties and independence. The whole amount of the Swiss military *Budget** is between four and five millions of francs, equal to ten millions of dollars for our 2,200,000 men—a trifle indeed.

From time to time the governors of neighboring states could unite the cadet-corps of different sections and invite the corps from distant states to send a contingent for a grand manœuvre. Such a proceeding would tend more to cement the band of brotherhood among the states than many artificial means. It would at the same time promote the good morals of the boys, if the governors were to select the

* Federal and cantonal.

best delegates from their states. Every obdurate, mischievous individual should be expelled from the ranks, since the state must not suffer a bad subject to enjoy the honor of serving his country. What a wonderful change will take place in the disposition of our youth; when accustomed to the discipline of a soldier, many a bad habit will disappear entirely. They will become punctual and orderly in the execution of their duties in general, their step elastic, their carriage erect, their bodies strong, their chests large, their cheeks rosy, a joy to their parents and a pride to our people. The lad who leaves his city or his state, if furnished with a regular certificate from his drill-master, can enter a company in the place of his future residence, and be no longer a stranger but a brother-soldier—the member of a mighty association. He enters the circle of well educated boys at once, and is thus saved from the danger of associating with such as might corrupt his good habits. There are thousands of advantages to him and the country, and not a single disadvantage. Why shall we not seize upon the subject at once? Let our small state have the honor to be the first, as we already have the best regulated system of schools —primary, secondary, and higher institutions. Forward! forward!

In a subsequent article we shall give a description of a "Swiss Shooting Festival." It is an ancient custom with the Alpine people, but since the system of cadet corps has become perfected, these festivals have come off with a splendor that had never before been dreamed of. They unite the men of all sections and have gained quite a fame in Europe.

We implore all statesmen and teachers to take the system of military drill and organization in schools into due consideration; not as a mere experiment, but as something that has proved an excellent success in a sister republic.

3. TARGET SHOOTING.

Having made military exercises a part of the regular routine of schools and the education of youths, and identified the vocation of the soldier with the privileges of citizenship and the safety of the state, the policy of the Swiss government, both cantonal and federal, has been directed so as to make the pastimes of neighborhoods and the national festivals minister to the general culture of a military spirit, and of the highest individual skill in the use of arms. To these ends target shooting is encouraged in various ways, and the festivals of the sharp-shooters are more generally and enthusiastically attended than any other national anniversary. We give below an account of a festival of this kind, which was held in Zurich in July, 1859.

A Festival of the Swiss Sharp-shooters.

The Frenchman has his rose festivals; the Italian his barcaroli; the Spaniard his bull-fights; the Englishman, since his cock-fights and boxing in the street are prohibited, has nothing left to him, for horse-racing as well as the Parliament belongs to the aristocracy only.* Germany has its popular festivals, though the potentates have suppressed even these harmless popular gatherings in several parts of the country.

In southern Germany and in the north-west you may still find the old-fashioned popular festivals. But Switzerland is their field; there in the land of freedom they flourish in the utmost freshness. They arouse and foster in the people the consciousness that they are a people—a nation; they awaken and strengthen the national spirit; they unite all citizens, whether they sit as legislators in the Diet, or till the ground in some unknown corner of the republic.

The festival begins at 6 o'clock, A. M., with the firing of cannon—one shot for each of the twenty-two cantons into which Switzerland is divided. The sharp-shooter festivals are the oldest of the Swiss popular festivals—the original fruits of a free warlike people. They are customary in every canton, in every community. But the *Swiss* sharp-shooter festival means that in which the whole country unites, and it has existed now for many, many years, always fresher and more beautiful, representing not only the united citizens of the Swiss cantons, but of Switzerland as a political power.

Such a festival takes place every second year. Then, thirty thousand free, warlike men, the best marksmen from all parts of the land, the "élite" of Switzerland's defenders, assemble with their rifles, which they handle with more skill than any other nation. They represent in fact the best men of their nation, the body guard of law and order, the rampart against hostile aggressions, and the stay of popular commotions. In such a noble assembly many a wise word is spoken, many an idea exchanged and corrected. The actions of the administration are subjected to a sharp but judicious and just criticism; you will not hear there ostentatious speeches, nor see noisy demonstrations. They do not pass resolutions such as we are wont to see in our country—a small clique of petty politicians announcing to the people that: *The People of the State, ... resolved, etc.*; but calmly they reason and reflect on what would be beneficial to all sections of the country, and after having reconciled the opposing interests of all,

* The rifle shooting, cricket matches, and other popular sports of England seems to be overlooked by Professor Simonson.

they go home and work each in his circle for the realization of their ideas. There is a principle—not of blind opposition to actions, whether good or bad, simply because they proceed from another party—but the principle of doing justice to all, of upholding the rights of all, and of reconciling opposing interests. A people that has been educated in such principles and acts in accordance with them has reached the perfection of republicanism, and need not fear either internal or external foes. Every American patriot may take example from this little Alpine race; and since every one, man or woman, is by nature an educator, whether as director of a household, or as a teacher of other men's children, let us all unite in educating the growing generation in the right way, and our beloved country shall never again see brothers in arms against brothers.

Many a corrupt official has feared the criticism of the assembly of the Swiss sharp-shooters, and whatever "the men have resolved at the festival," is usually adopted by the people and carried through in a judicious, constitutional way.

At the above-mentioned day Zurich was all in a glee; the city adorned with flags, triumphal arches and evergreens, the streets thronging with people in Sunday dress who had come from far and wide to participate in the popular feast. The shrill sound of an engine is heard, and soon after the first company of guests from abroad forms in line at the railroad station. It is the delegation from the Bremen sharp-shooters, who have come from the far north of Germany to meet their brethren of the south. They are enthusiastically received by the crowd, the mayor addresses them and gives them a cordial welcome to the land of freedom. After one of their number has replied to the speech, the mayor leads the guests to a tent and invites them to partake of some refreshments; the best of native wines from the "Rathskeller" are offered, and many a toast spices the nectar.

An hour later the flag of the Swiss sharp-shooters is received and unfolded, while shouts and the roar of cannon rend the air. As we stated before, the festival of the United Sharp-shooters comes off once in two years, city and canton taking their turns. Two years before, in July, 1857, it had been celebrated in Berne, and the flag had remained there until now, when a deputation from Berne delivers it to the sharp-shooters of Zurich, to be kept by them for the next two years; and so on.

As soon as the banner is unfurled the procession is formed, and the banner and guests are escorted to the City Hall, preceded by bands of music playing national airs. What a glorious sight! Man and nature

seem to revel together in joy. The bright morning sunshine gleams from the polished rifles and a thousand flags wave in the light breeze, while the procession is accompanied by crowds of men and women, boys and rosy-cheeked girls who, dressed in white and decked with red ribbons, in the national costume and colors, add an element of bewitching beauty to the scene.

Meanwhile other companies of riflemen have arrived, and the lake is still covered with festively-adorned gondolas that are continually adding to the crowd of guests. At 10 o'clock the procession is again formed. It leaves the city and moves toward the "Seefeld," a large meadow on the shore of the lake, a short distance from the city. Here an immense hall has been erected. Behind it are arranged the targets and shooting-stands, and opposite we see a neat structure in the form of a temple, with many large windows, in which are exhibited the prizes, disposed in the most attractive manner. These prizes are of the value of 104,407 francs, and are the contributions of all parts of the world—every corner where a few Swiss are to be found, having furnished some small gift in honor of the national festival.

The procession halts in front of the temple. The Bernese deliver into the hands of the Zurich delegation the flag of the Swiss Rifle Corps, and Colonel Kurtz, of Berne, thus briefly addresses them: "When two years ago this flag was delivered into our safe keeping, peace reigned all around us; and but just now our country has come forth victoriously from a crisis in which we have shown, as we had never done before, that we are *one* band of brethren.* What we have hoped for is now realized, and we can carry this flag—the banner of the largest association in Switzerland—to the beautiful lake whose blue waters play around our sister town. We of Berne have held this flag in peace. Who knows whether you will be as fortunate, or whether you will be forced to plant it on the highest pinnacle of your good city, as a sign that the fatherland is in danger and calls upon her sons to defend her. Relentless war rages now on our borders;† we know not whether the storm will pass over, or the thunderbolt strike in our midst."

Dr. Dubs replies in a brilliant speech: "We receive this banner and shall defend it. We are ready now for a joyous feast, and as ready at any time for the war-dance. Let the trumpet sound and

* He alludes here to the Neufchatel difficulty. This canton had been heretofore under the sovereignty of Prussia, and a handful of royalists made the attempt to sever it from all connection with the confederacy. The people defeated them and voted themselves independent. Switzerland assisted them and Prussia gave up whatever rights she might have had.

† The Italian.

Zurich's men will be the first in the field to lead you on to victory or death!" etc.

Thus was the festival opened. A dinner had been prepared in the hall, to which all marksmen, whether from home or abroad, were invited. This hall is a wooden structure of large dimensions, open at the sides, with a wide passage running through the middle, intersected by several narrow ones. In the middle of the building is a magnificent fountain. The whole remaining space is filled with tables and benches of unvarnished pine, at which 6,000 persons may be conveniently seated and served. A platform hung with Swiss banners is so placed that the speakers can be heard through the whole hall, and many a wise word has been thence spoken that met a ready response from both present and distant brethren. Behind this platform is raised a lofty gallery for the music. Here the bands play soul-stirring chorals and national tunes, and when the "Marseillaise," or other similar air is heard, a chorus of thousands of voices accompanies enthusiastically the instruments. It is in fact a feast of the people; unity, peace and joy reign every where. There may be seen men of different religious and political creeds, embracing each other in brotherly concord. Men whose language is Italian from the southern cantons, and men who speak French from the west, and German from the northern, eastern, and middle cantons, form *one* family, though their localities, institutions, and interests may differ widely. The words which Schiller, in his well-known historical drama, "Tell," causes Rösselmann to express—

> "By this fair light, which greeteth us before
> Those other nations that, beneath us far,
> In noisome cities pent, draw painful breath,
> Swear we the oath of our confederacy!
> We swear to be a nation of *true brothers*,
> Never to part, in danger or in death!

These words have become true in our age.

At 1 o'clock the firing of a cannon announces the commencement of the target shooting. The marksmen press to the stands, and their shooting continues from morning till evening, with only an intermission of an hour for dinner, for an entire week. As we have before said, the shooting-stands are erected at the end of the hall, but in a separate building. Ninety-six stands are arranged in one line, each with its own target, so that nearly a hundred shots may be fired at once. Behind each stand there is sufficient space for loading the rifles, and all the necessary apparatus. There are smaller buildings near by for the repairing of arms, and a regular field-hospital, completely furnished,

to supply medical or surgical aid to such as may fall suddenly sick or be wounded. The medical fraternity of Zurich have offered their services in turn, and two physicians of their number are always present day and night. The shooting is directed towards the lake and large quantities of firewood are piled up like a rampart around the grounds, so that an accident is almost impossible. Navigation on the lake within a certain distance is also prohibited. The safety of the people is thus secured, and an accident can happen only at the stands or to a careless target-man. Only two injuries in all have been reported—a finger-wound received by a marksman, and the loss of an eye to a target-man by a splinter from the target.

More than thirty thousand tried their skill during the ten days of the festival. On the 7th of July 74,000 shots were fired, and about 61,000 on the 11th, though many of the people had already gone home. The rifles and targets are of various kinds. The Swiss have rifles for field service, and also target rifles—the latter being much the heavier. No support whatever is used with either. The distance of the target is proportioned to the calibre of the rifles, the "field targets" being over a thousand, and the "stand targets" about six hundred feet distant. Both the stand and field targets are sub-divided into "Stich" and "Kehrscheiben;" the former a single fixed target, the latter made double and turned around after each shot, so as to be immediately ready for another marksman. The "Kehrscheiben" are designated by the letters in the order of the alphabet; the "Stichscheiben" have names attached to each, such as "the Stand," "Fatherland," "Industry," "Titlis," "Pilatus," "Rigi," "Gotthard," Jungfrau," "Splügen," "the Field," &c. No more than one shot may be fired by the same marksman at any of the "Stichscheiben," with the exception of the "Fatherland," at which two are allowed. The number of shots at the "Kehrscheiben" is not limited, but all must be paid for—the "Kehrscheiben" at the rate of about thirty centimes, (six cents;) the "Stichscheiben" a little more. Commutation tickets, however, may be obtained.

The prizes are very various, but the most valuable are appropriated to the "Stichscheiben." The first prize this year was a large silver basin, of exquisite workmanship, together with 2,500 francs ($500) in money, given by the Swiss in Paris, to be won at the target "Fatherland." The lowest prize is five francs, and this can be won only by those who succeed in hitting the bull's eye, the size of which varies in the different targets. In the "Stichscheiben" for the target rifle it measures ten inches in diameter, but in the "Kehrscheiben"

only two and a half, while in the "Kehrscheiben" for the field rifle it measures six inches. Every six hits in the centre of the "Kehrscheiben" gains a prize of five francs, to which is added on the twenty-fifth successful shot, a silver cup or watch. He who hits the bull's eye fifty times receives another prize of one hundred francs. Special prizes are also given to the best marksman *of the day*, for the first and last hits *of the day*, and for the greatest number of hits during *the whole festival*, etc. The prizes of the day may be obtained immediately; the others are distributed publicly at the close of the festival.

Let us now give a glance at the "Gift Temple." This neat structure is made wholly of glass, save the roof, in order that the rich prizes may be more conspicuously exhibited. Here are gifts and prizes for the successful shooters, consisting either in articles of value or in money, that have been contributed by the cantonal governments and communities, and by individuals at home or abroad. The government has also had new Swiss five-franc pieces coined for this purpose, bearing on their face the figure of a rifleman instead of Helvetia. There is many a piece of fine workmanship among the gifts, of which we can here only mention the silver basin with the 2,500 francs, the first prize of the "Fatherland," and a beautiful drinking horn of massive silver, richly embossed, presented by some friends in Leipsic. The Bremen sharp-shooters also brought with them twelve "Römer," large cups of massive silver, gilt within, which were admired and coveted by all the disciples of Bacchus. This was not, however, the only present from the old Hanse-town. The senate had opened the celebrated "Rathskeller" and sent some of their Hock of the vintage of 1684, the Nestor of German wines, to their brothers in Bacchus. The greater part of these gifts consisted in silver cups, and pitchers, and gold and silver watches.

During the festival the houses of Zurich continued adorned with flags, transparencies, and evergreens, which were every day entwined with fresh flowers. Near the festive hall a triumphal arch had been erected, on which stood a colossal figure of William Tell in the act of menacing Gesler with the arrow, after having shot the apple from the head of his boy. Some of the critics would have us believe that Tell is not Tell, that no such person ever existed, but that he is a purely mythical character—the creation of Schiller's imagination. Yet it matters little to the Swiss whether the hero was, or was not; all these thousands of marksmen who daily pass that triumphal arch are possessed by one thought, and many can not refrain from shouting, "Hurrah for Tell, father of the marksman! The Swiss of to-day is as

skillful an archer, as daring and as free as thou wast!" Myth or not, Tell is the man of the people, the Washington of Switzerland—or, rather, Washington is the Tell of America; and these words of the dying Attinghausen—

> "Hold fast together, then—for ever fast.
> Let freedom's haunts be one in heart, in mind!
> Set watches on your mountain tops, that league
> May answer league, when comes the hour to strike.
> Be *one*—be *one*—be *one*"—

are never forgotten in these days by the inhabitants of Switzerland.

Around the hall there has sprung up a village of wood and canvas, and while the men are engaged with their rifles, the women and children crowd to see the circus, the menageries, rope-dancers, puppet-shows, "the giant Kentuckian," "General Tom Thumb," &c., and while every one amuses himself, there is no rioting, no impropriety, no beggary, no placards bidding us to "Beware of Pickpockets;" the people are as sound as their institutions.

At 8 o'clock in the morning the target shooting commences, closing at 8 in the evening. The target and signal men are promptly at their stations, and the members of the different committees for keeping order, arrive one by one. The marksmen are impatiently awaiting the signal shot. Spectators gather in from all sides. The signal is given, and in a moment the sharp crack of ninety-six rifles is heard. The firing is kept up incessantly till noon, when the sound of the cannon again calls to dinner. At about 10 o'clock the first steamers have landed their passengers from "beyond the water," and the first trains have come in, bringing new guests to supply the place of those who leave, so that new faces and new acquaintances greet us every day. Here a fresh company of sharp-shooters from distant Ticino approaches, marching to the sound of music and preceded by their flag, and receive their welcome—there another company from Neufchâtel is escorted to the station and takes its departure homeward.

One of the most joyous occurrences of the festival—a silvery gleam in the general sunshine—was the reception of the marksmen from the four forest towns, Lucerne, Switz, Uri, and Unterwalden. They numbered full seven hundred men, noble specimens of the native Swiss, all picked men—"Kernmannen." They were preceded by four of their number attired in the ancient national costume, who carried the very same bugles that for the last five centuries had called their forefathers to arms. The ancient banners followed. As they passed under the triumphal arch and beheld their father, Tell, their shouts, hurrahs, and vivas, knew no bounds. Their ranks were broken and

each threw himself upon the breast of the nearest stranger—nay, brother. The very men that perhaps were adversaries in public life, or opposed to each other in political principles, were here united; the love of fatherland was a common bond of union. Thus, also, Schiller speaks through the mouth of Meier:

> "I know him well. There is a suit between us,
> About a piece of ancient heritage;
> Herr Reding, *we are enemies in court;*
> *Here we are one.*"

Thus is it in Switzerland. Will it ever be so with us? Come, ye educators of the people and of the young, preach this principle from the pulpit, and make it the corner stone of your instructions in the school and at the firesides of your homes!

At the signal for the noon intermission the firing immediately ceases, and in a few minutes 6,000 hungry and thirsty people are seated at the one hundred and fifty tables in the hall; the rest disperse to the eating-houses in the neighborhood and in the city. The dinner is enlivened by toasts which, however, are never of a personal character. No homage is done to the individual; to the country, to the fatherland alone, is homage due in a republic. Toasts are heard in German, in French, in Italian—yet all tongues unite in the glorification of a common country. Separate tables are set for the different cantons, but so arranged that the more distant cantons are usually the nearest together —Ticino near Berne, Geneva near Basle, Zurich near Vaud. In the middle of the hall are the tables for the committees and the honorary guests.

On the second day of the festival the delegations of marksmen hold a general conference, and though they enter the hall with opposing opinions and feelings, yet before they part all differences are settled, all contradictions are reconciled, and their resolutions are usually endorsed by the whole people. There is no tendency to disunion, no necessity for secession, for each one endeavors to satisfy the wishes of the other; the public weal is considered, not the interest or aggrandizement of the individual or of the canton.

On Sunday, the 10th of July, a public service was held on the meadow It was a solemn ceremony, attended by all the different creeds that hold fellowship together. On the next day the members of the Diet, which was then in session at Berne, visited Zurich. The banished duchess of Parma, who lives in the neighboring Swiss town, Pappenschwyl, was also the guest of the citizens. She and her children sat with them at the rough pine board and partook of the same

viands. After the dinner she said, with tears in her eyes, "The Swiss do not know how happy they indeed are."

On Tuesday, July 12th, the last shot was fired, and on the following day the prizes were distributed. This ceremony took place on the grounds before the gift temple. President Dubs opened with a speech, in which he said: "We are distributing now the prizes to those who have proved themselves the best marksmen. An equal chance is given to all; let all practice with their weapons and emulate their lucky companions. I am convinced that all who have hit the centre of the target will be able to pierce the breast of the enemy, should war be unavoidable." The first prize, the silver basin from Paris, with the 2,500 francs, was won by a manufacturer, Durrer, of Unterwalden; the second, the silver horn from Leipzig, by a farmer named Glogg, of Obermeilen; the third, the twelve silver cups from Bremen, jointly by Professor Dr. Hug, of the University of Zurich, and Mr. Baer, of Männedorf, the best shot in Switzerland, who had hit the target four hundred and eighty-seven times during the festival.

The whole was closed with a serenade, given by the marksmen to President Dubs, the chief magistrate of the confederacy, as well as president of the festival. The next day the remaining guests departed, the garlands and banners disappeared, the people returned to their business, all external show had vanished; but the feeling that Switzerland's sons have again renewed the bonds of their brotherhood still survives in the breasts of that simple, quiet people—our republican brethren of the Alps.

NOTE.

The following notice of the Swiss Military System, and particularly of its Cantonal Musters, and the Federal Encampment at Thoun is taken from a work published in Belgium in 1858.

The Swiss system educates from infancy, all its male citizens to the duty of a soldier. Each individual must know how to bear the fatigues of a march, to manage arms and to shoot well. Adults from twenty-one to twenty-nine are practised the whole year around, on fixed days in their native place. So far is the duty of each city, town and village.

The Canton has the charge of the more advanced exercises—that is the finishing of the soldiers' education, and the adapting of his knowledge to the practicalities of life. Every year at fixed times, before the first harvest, and again between the last harvest and the vintage, the Canton assembled all adults in active service, and retains them for two or three weeks. They encamp and act in all things as if they were actual troops assembled for war. They make the same maneuvers, are prepared for the inspection of the federal officers who are sent to test the actual knowledge of the soldiers of each Canton. This is for the *infantry* and *cavalry* alone.

For the *artillery* there are permanent camps established in different parts of Switzerland, of which the camp of *Biere*, (not far from Auboune,) is the most important one.

The crowning of all these exercises is the campaign in the federal camp of "Thoun." These maneuvers take place at irregular times fixed by government, which also designates the number of troops which shall assemble themselves there, and the officer who shall command. This camp is situated five miles from Bern. The little city of Thoun is at the entrance of a valley which is bounded on the south by the first peaks of the Beruese Alps. Here the Swiss army finds a place fitted for all the movements of the plain, the marches and feigned combats on the mountains and the crossing of rivers. The army encamps under tents. The hospitals and such other things as are necessary are in the city of Thoun. The inspection is very severe, the army being tested in every possible way in which it would be possible for them to be tried in actual war. They make long marches, transport the artillery to different places, and in short perform every duty. Distinguished officers from other countries and even King's come to witness this spectacle.

IV. THE STAFF OR WAR SCHOOL AT VIENNA.

[From Report of English Commissioners in 1856.]

The Staff School (Kriegs-Schule,) in Vienna, was established in 1851, and grew out of the experience of the Hungarian war, although a Staff-Corps had existed for more than a century in the Austrian army, and for many years past all the appointments in it have been made upon an examination, which was, in fact, one of competition. The process was formerly as follows:—

An officer desirous of becoming a candidate for a staff appointment, sent in his name to the colonel of his regiment, whose recommendation he was obliged to obtain as a preliminary step. If supplied with this, he began his course of staff study, and was sent for this purpose to some large garrison town as an *attaché* to the staff. Whilst here he went through, for two years, the course of drawing, writing military memoirs, mapping the country, &c., and for two years more served on active staff duty with different bodies of troops. At the end of these four years a number of the officers thus employed in a particular country were brought together, and examined by the chief of the staff in the country, assisted by a board of officers appointed for the purpose. No actual list was drawn out of the order in which the candidates acquitted themselves, but it was understood that the best were chosen and put upon the general staff. The work upon this was exceedingly laborious; few except officers of real ability were candidates for it, and patronage in it was looked upon with great dislike. On the other hand, studies and reading were not made the first requisite; a ready intelligence and quick eye to make an officer a *Colonnen-führer*,—leader of a column on a march,—were always most valued.

Before describing this school, it may be as well to mention shortly the staff-corps and the corps connected with it.

1. The General Staff of the Austrian Army consists of:—

Twelve Colonels.
Twelve Lieutenant-Colonels.
Twenty-four Majors.
Eighty Captains.

The *attachés*, to the number of eighty,—*i. e.*, those who are expecting appointments, may be subalterns, but they obtain the rank of captain on joining.

The chief of the staff-corps is Field-Marshal Hess.

2. There has been created very lately a separate corps of adjutants or aids-de-camp, who are charged with the administrative duties, such as inspecting the bearing, equipment, carrying on the discipline, &c., of the troops. This consists of—

Eleven Generals.
Eighteen Lieutenant-Colonels.
Eighteen Majors.
Fifty-eight First Captains.
Ten Second Captains.
Ten First Lieutenants.

There is no examination for entrance into this corps. Appointments are made by the generals, and we were told that there was some scope for "protection."

3. There is also a smaller corps for the purpose of surveying, called the Corps of Geographical Engineers, connected with the staff, inasmuch as some of the staff officers draw the maps on a large scale, which it is the business of this corps to reduce. It is usually occupied on the Great Surveys of the Empire; at present it is employed on the Survey of the Principalities.

It consists of—

One Colonel, called the Director.
Two Lieutenant-Colonels.
Two Majors.
Sixteen Captains.
Sixteen Lieutenants.
Four Sous-Lieutenants.

The staff school consists of thirty pupils taken from all arms of the service, fifteen being received each year, and the course of study lasting two years. It is under the direction of a general and a lieutenant-colonel; and, with few exceptions, such as might occur in the time of war, no appointments on the general staff are to be given to any officers who have not passed through the staff school.

In order to enter the school for the staff corps, an officer must have served at least two years with his regiment, and be unmarried, and above twenty-one and under twenty-six years of age. He may then forward to the chief of the staff, through his colonel, his claim to be admitted as a candidate at the entrance examination. Further inquiry is made, and a good many of the names sent in are struck off the list. Such, we were told, was the case last year when the names sent in were very numerous, but out of these only forty-five were allowed to compete, and out of these again only fifteen (the regular yearly number) were selected. The competition for entrance into the school is indeed said to have been very active ever

since it was opened. Most of the students are *Neustadters;* the seven professors were all, with the exception of the professor of the French language, military men, and chiefly officers of artillery, formed in the long studies of the old Bombardier School.

The subjects in which the candidates for admission are examined are—

1. Algebra and Geometry, Plane and Spherical Trigonometry.
2. Geography.
3. History.
4. Arms and Munitions.
5. Field and Permanent Fortification.
6. Pioneering.
7. Rules of Drill and Exercises.
8. Manœuvring.
9. Military Drawing.
10. Military Composition.
11. French.
12. To be able to speak one of the Austrian national languages, and to write a good current and legible hand.

The most striking features in the system of this school, both at the entrance and throughout the course, are that it is distinctly competitive, that it admits very young officers, and that while the work is considerable, the subjects for study are not numerous. In these three points it differs considerably from the Prussian Staff School, in which the students are generally older, and the principle of competition is not so fully carried out. In the Austrian school, the students are placed on entering in the order which their entrance examination has just fixed. They are examined once a month during their stay. On leaving the school, their respective places are again determined, and they have a claim for appointments in the staff corps in the exact order in which they were placed on leaving the school.

Their relative places on leaving the school are assigned to them, as we were assured, very carefully, and, after much consultation in every case among the professors; but this is not done by marks, nor by any minute system of testing intellectual qualifications, but an estimate is formed upon the whole work of the two years, both on the studies in the school and the practice in the field,—of the student's comparative fitness, *as an officer*, *for the work of the staff.* "We try to estimate the whole man," was the expression used to us, "whether he will make a good *Colonnen-führer*" (a good man to direct a regiment on a march,) as was said elsewhere. This general estimate was preferred to that of marks, on the ground that the latter might give too much weight to the more appreciable, *i. e.*, simply intellectual qualities.

The students do not at present live within the establishment, but

are to do so when the new ones, building, are ready. They begin their lectures at half-past seven and end at one or three o'clock on alternate days, going to the riding-school in the afternoon on the days when their morning's work ends at one. Thirty horses are kept for their use.

The subjects of instruction during the first year consist of—

1. Military Drawing and the Study of Ground and Positions.
2. Higher Tactics.
3. Staff Duties.
4. French Language and Literature.
5. Riding.

And those of the second year are as follows:—

1. Military Drawing, and the Study of Ground and Positions.
2. Military Geography.
3. Principles of Strategy, illustrated by representations of some of the most instructive campaigns.
4. French Language and Literature.
5. Riding.

The students are occupied at the school about eight hours daily, and their chief work is military drawing and topography. We went into the room where the students of both years were working together at drawings and plans under an artillery officer, said to be one of the best draughtsmen in the army. Some of the plans were modeled in soap, the *hachures* being marked very elaborately, so that the models and drawings might closely correspond. We also attended a lecture of the second class in military geography. A student traced out on the blackboard the line of the Western Alps, and was examined very closely on the smaller passes, the rivers, and the bases of operations for armies on both sides. The answers were very minute, and given with the greatest readiness; and we understood the question to be taken at random, and not to be a prepared one.*

* It may be desirable to give some specimens, taken from the official account of the school, of the questions put at the examinations for admission,

I. *Viva voce.*

1. Mathematics:—
   Give an explanation of geometrical series, and a proof of the general formula.
   How is the circumference and area of a circle determined? How are the trigonometrical functions of the different quadrants of the circle indicated?
2. Geography:—
   What is meant by the *backbone* of Europe? What states does it pass through?
   The source of the Elbe; its principal feeders?
3. History:—
   Describe generally the wars of Charles V.
   The political consequences of the Battle of Leipzig.
4. Arms and Munitions:—
   What is the material of sword blades? how are they made and proved?
   How are gun carriages made for field and siege guns?
   What kinds of hollow shot are used in the Austrian artillery, and on what do their effects depend?

The student officers attending the school are called upon to serve in those arms to which they do not belong. For this purpose they join the troops of the garrison of Vienna during June, July, August, and September, and if they belong to the infantry they go through all the exercises of the cavalry in one year, and of the artillery in another. If they belong to the cavalry, they go in the same manner through the exercises of infantry and artillery. After going through this practice, they have to take command of a battery, of a squadron of cavalry, and of a division of infantry.

The month of May is devoted in the first year to an expedition for practice in surveying the country, and in the second, for making reconnaissances, &c.

October is a vacation in the first year. In the second it is taken up with the final examination before leaving.

The officers acting as professors receive 600 florins, about 60*l.* annually, besides their pay.

Immediately after the final examination, if there are any vacancies in the staff corps, the pupils receive appointments in order of merit, and are at the same time made captains. In proof of their receiving appointments on the earliest opportunity, we were told by Colonel Scudier that the last ten vacancies in the staff corps were filled up out of the twelve students who had just left the school.

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5. Field and Permanent Fortification :—
   - How is a trench made?
   - How is a parapet built?
   - What does a front of fortification consist of? what is the disposition of the several lines? what parts protect the principal rampart? what is the form of the flanks? and how is the main ditch made?
   - What is meant by detached works? where are they placed?
   - What are the best arrangements for the successful defense of a fortress?
6. Pioneer Service :—
   - How are two beams of the same dimensions fastened together in the same direction?
   - How are suspension bridges put up?
7. Rules for Drill and Exercise :—
   - (*a.*) Infantry.
     - Wheeling during a march.
     - Forming of close battalion column.
   - (*b.*) Cavalry.
     - Marching in files and fours.
     - Forming line from the flank to the front and rear.
   - (*c.*) Artillery.
     - Intervals and distances in a battery.

II. Paper Work.

In Mathematics :—

1. Prove that in every triangle the square of the one side is equal to the sum of the squares of the two other sides, less twice the product of these two, multiplied by the cosine of the angle they inclose.
2. If the hypothenuse is 33, and one angle 25° 48′ 12″, find the other angle and the perpendicular, &c.

One of these was only a second lieutenant, and in order to make him a captain, (the rank required for the staff corps,) the Emperor promoted him to be a first lieutenant immediately, and to be a captain within three days afterwards. This double promotion was on the ground of great merit.

If an officer finds no vacancy in the staff corps ready for him, he must return to his regiment and wait as an attaché. But if a second lieutenant, he is entitled immediately to a step of rank, and if a lieutenant, after three years' service he is made a captain, although he may not even then be attached to the staff corps.

There are to be eighty of these attachés to the staff. Their number at present amounts to only thirteen.

With regard to special aids-de-camp, generals are allowed to choose their own, without examination, but with this limitation, the officer chosen must not be a relation.*

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* The following shows the nature of the Report presented by the examiners upon an Officer examined for admission. It is called the *Prüfungs-Act*, and is sent into the Supreme War Department, that is, to the Fourth Section.

Form No. I. gives the name, age, rank, and length of service of the Candidate (Lieut. R. H.)

Form No. II. :—*a* Oral Examination.

1. Mathematics,	Very good.
2. Geography,	Very good.
3. History,	Very good, knowledge thorough, statements logical.
4. Arms and Munitions,	Excellent; acquainted with the very details.
5. Field and Permanent Fortification,	Both satisfactory.
6. Pioneer Service,	Very good.
7. Drill and Exercise Rules—	
Infantry,	Very good.
Cavalry,	Not thorough.
Artillery,	Good.
8. Manœuvring,	Excellent.
9. French,	Translates without difficulty from French into German, and German into French. Not much practice in speaking.
10. National languages,	Speaks good Bohemian.
b. Paper Work—	
1. Mathematics,	&c. &c.
c. Accomplishments—	
Writing.	
Military Drawing.	

Remarks.—Lieutenant R. H. is a pupil of the Neustadt Academy, of much natural talent, and quick apprehension. His way of expressing himself is quick and logical, and shows a clear head. He has a fair military bearing, and prepossessing appearance. He gives every hope of proving a useful Officer of the Staff, and deserves admission into the War School.

Form No. III. gives the questions actually put, as in the note on the preceding page.

(Signed) . . . . . .

V. THE STATE AND EDUCATION.

Second Article.

What Lycurgus thought most conducive to the virtue and happiness of a city, was principle interwoven with the manners and breeding of the people. This would remain immovable, as resting on inclination, and be the strongest and most lasting tie; and the habits which education produced in the youth, would answer in each, the purpose of a lawgiver. For he resolved the whole business of legislation into the bringing up of youth—which he looked upon as the loftiest and most glorious work of a lawgiver, and he began with it at the very source. PLUTARCH.

You [Athenians] will confer the greatest benefit on your city, not by raising the roofs, but by exalting the souls of your fellow-citizens; for it is better that great souls should live in small habitations, than the abject slaves should burrow in great houses. EPICTETUS.

That the education of youth ought to form the principal part of the legislator's attention, can not be a doubt, since education first molds, and afterwards sustains the various modes of government. The better and more perfect the systems of education, the better and more perfect the plan of government it is intended to introduce and uphold. In this important object, fellow-citizens are all equally and deeply concerned; and as they are all united in one common work for one common purpose, their education ought to be regulated by the general consent, and not abandoned to the blind decision of chance, or to idle caprice.

ARISTOTLE.

What, under heaven, can there be more worthy of our most strenuous attention, than knowledge; what more worthy of our highest admiration? Is calmness or serenity of mind the object of our wishes? What so likely to secure it as the pursuit of that knowledge which enables us to enjoy life in the happiest manner? Or do we esteem above all things unsullied integrity and spotless virtue? Either the study and acquisition of wisdom point out the path, or there is none, to the attainment of these distinctions. CICERO.

By learning, the sons of the common people become public ministers; without learning, the sons of public ministers become mingled with the mass of the people. *Chinese maxim.*

I promised God, that I would look upon every Prussian peasant child as a being who could complain of me before God, if I did not provide for him the best education, as a man and a Christian, which it was possible for me to provide. DINTER. *Autobiography.*

Education makes the man; that alone is the parent of every virtue; it is the most sacred, the most useful, and, at the same time, the most neglected thing in every country. MONTESQUIEU.

It is not for the sake of a parish only, nor for the mere local interests, that the *law wills* that every native of France shall acquire the knowledge necessary to social and civilized life, without which human intelligence sinks into stupidity, and often into brutality. It is for the sake of the state also, and for the interests of the public at large. It is because liberty can never be certain and complete, unless among a people sufficiently enlightened to listen on every emergency to the voice of reason.

Universal education is henceforth one of the guarantees of liberty, and social stability. As every principle in our Government is founded on justice and reason, to diffuse education among the people, to develop their understandings, and enlighten their minds, is to strengthen our constitutional government, and secure its stability. M. GUIZOT.

The education required for the people is that which will give them the full command of every faculty, both of mind and of body; which will call into play their powers of observation and reflection; which will make thinking and reasonable beings of the mere creatures of impulse, prejudice and passion; that which in a *moral* sense will give them objects of pursuits and habits of conduct favorable to their own happiness, and to that of the community of which they will form a part; which, by multiplying the means of rational and intellectual enjoyment, will diminish the temptations of vice and sensuality; which, in the social relations of life, and as connected with objects of legislation, will teach them the identity of the individual with the general interest; that which, in the physical sciences—especially those of chemistry and mechanics—will make them masters of the secrets of nature, and give them powers which even now tend to elevate the moderns to a higher rank than that of the demi-gods of antiquity. All this, and more, should be embraced in that scheme of education which would be worthy of a statesman to give, or of a great nation to receive; and the time is near at hand, when the attainment of an object, thus comprehensive in its character, and leading to results, the practical benefits of which it is impossible for even the imagination to exaggerate, will not be considered an Utopian scheme.

E. H. HICKSON. "*Westminster Review.*"

Did I know the name of the legislator, who first conceived and suggested the idea of common schools, I should pay to his memory the highest tribute of reverence and regard. I should feel for him a much higher veneration and respect, than I do for Lycurgus and Solon, the celebrated lawgivers of Sparta and Athens. I should revere him as the greatest benefactor of the human race; because he has been the author of a provision, which, if it should be adopted in every country, would produce a happier and more important influence on the human character, than any institution which the wisdom of man has devised.

JUDGE SWIFT.

If you suffer your people to be ill educated, and their manners to be corrupted from their infancy, and then punish them for their crimes to which their first education disposed them, what else is to be concluded from this but that you first make thieves, and then punish them?

Though there be not many in every city which be exempt and discharged of all other labors, and appointed only to learning—that is to say, such in whom, even from their very childhood, they have perceived a singular towardness, a fine wit, and a mind apt to good learning—yet all in their childhood be instructed in learning. And the better part of the people, both men and women, throughout all their whole life, do bestow in learning those spare hours which we said they have vacant from bodily labors. SIR THOMAS MOORE. *Utopia.*

To make the people fittest to choose, and the chosen fittest to govern, will be to mend our corrupt and faulty education; to teach the people faith, not without virtue, temperance, modesty, sobriety, economy, justice; not to admire wealth, or honor; to hate turbulence and ambition; to place every one his private welfare and happiness in the public peace, liberty and safety. MILTON. *Way to establish a Free Commonwealth.*

The discipline of slavery is unknown
Among us—hence the more do we require
The discipline of virtue; order else
Can not subsist, nor confidence, nor peace.
Thus, duties rising out of good precept,
And prudent caution needful to avert
Impending evil, equally require
That the whole people should be taught and train'd.
So shall licentiousness and black resolve
Be rooted out, and virtuous habits take
Their place; and genuine piety descend
Like an inheritance, from age to age. WORDSWORTH.

Train up thy children, England! in the way
Of righteousness, and feed them with the bread
Of wholesome doctrine. Where hast thou thy mines
But in their industry?
Thy bulwarks where but in their breast?
Thy might but in their arms?
Shall not their numbers therefore be thy wealth,
Thy strength, thy power, thy safety, and thy pride?
Oh grief then, grief and shame,
If in this flourishing land
There should be dwellings where the new-born babe
Doth bring unto its parent's soul no joy!
Where squalid poverty
Receives it at its birth,
And on her wither'd knees
Gives it the scanty food of discontent! ROBERT SOUTHEY.

The education of the common people requires, perhaps, in a civilized and commercial society, the attention of the public more than that of people of some rank and fortune. * * *

They have little time to spare for education. Their parents can scarce afford to maintain them even in infancy. As soon as they are able to work, they must apply to some trade by which they can earn their subsistence. That trade, too, is generally so simple and uniform, as to give little exercise to the understanding; while, at the same time, their labor is both so constant and so severe, that it leaves them little leisure and less inclination to apply to, or even to think of any thing else. * * *

For a very small expense the public can facilitate, can encourage, and can even impose upon almost the whole body of the people, the necessity of acquiring these most essential parts of education. * * *

The public can facilitate this acquisition, by establishing in every parish or district a little school where children may be taught for a reward so moderate, that even a common laborer may afford it; the master being partly but not wholly paid by the public; because if he was wholly, or even principally paid by it, he would soon learn to neglect his business. * * *

A man without the proper use of the intellectual faculties of a man, is, if possible, more contemptible than even a coward, and seems to be mutilated and deformed in a still more essential part of the character of human nature. Though the state was to derive no advantage from the instruction of the inferior ranks of people it would still deserve its attention, that they should not be altogether uninstructed. The state, however, derives no inconsiderable advantage from their instruction. The more they are instructed, the less liable they are to the delusions of enthusiasm and superstition, which, among ignorant nations, frequently occasion the most dreadful disorders. An instructed and intelligent people, besides, are always more decent and orderly than an ignorant and stupid one. They feel themselves, each individually, more respectable, and more likely to obtain the respect of their lawful superiors, and they are therefore more disposed to respect those superiors. They are more disposed to examine, and more capable of seeing through, the interested complaints of faction and sedition; and they are, upon that account, less apt to be misled into any wanton or unnecessary opposition to the measures of government. In free countries, where the safety of government depends very much upon the favorable judgment which the people may form of its conduct, it must surely be of the highest importance that they should not be disposed to judge rashly or capriciously concerning it.

Adam Smith. *Wealth of Nations, Book V., Education of Youth.*

But there are other things, of the worth of which the demand of the market is by no means a test; things of which the utility does not consist in ministering to inclinations, nor in serving the daily uses of life, and the want of which is least felt where the need is greatest. This is peculiarly true of those things which are chiefly useful as tending to

raise the character of human beings. The uncultivated can not be competent judges of cultivation. Those who most need to be made wiser and better, usually desire it least; and if they desired it, would be incapable of finding the way to it by their own lights. It will continually happen, on the voluntary system, that, the end not being desired, the means will not be provided at all, or that the persons requiring improvement having an imperfect or altogether erroneous conception of what they want, the supply called forth by the demand of the market, will be any thing but what is really required. Now any well-intentioned and tolerably civilized government may think without presumption that it does or ought to possess a degree of cultivation above the average of the community which it rules, and that it should, therefore, be capable of offering better education and better instruction to the people, than the greater number of them would spontaneously select.

Education, therefore, is one of those things, which it is admissible in principle that a government should provide for the people. The case is one to which the reasons of the non-interference principle do not necessarily or universally extend.

With regard to elementary education, the exception to ordinary rules may, I conceive, justifiably be carried still further. There are certain primary elements and means of knowledge, which it is in the highest degree desirable that all human beings born into the community should acquire during childhood. If their parents, or those on whom they depend, have the power of obtaining for them this instruction, and fail to do it, they commit a double breach of duty; toward the children themselves, and toward the members of the community generally, who are all liable to suffer seriously from the consequences of ignorance and want of education in their fellow-citizens. It is therefore an allowable exercise of government, to impose on parents the legal obligation of giving elementary instruction to children. This, however, can not fairly be done, without taking measures to insure that such instruction shall always be accessible to them, either gratuitously or at a trifling expense.

John Stuart Mill. *Political Economy*, v. 9, § 8.

That the people should be well educated is in itself a good thing: and the state ought therefore to promote this object, if it can do so without any sacrifice of its primary object. The education of the people, conducted on those principles of morality which are common to all the forms of Christianity, is highly valuable as a means of promoting the main end for which government exists; and is on this ground an object well deserving the attention of rulers.

Thomas Babbington Macauley. *Church and State.*

Athens, by this discipline and good ordering of youth, did breed up, within the circuit of that one city, within the compass of one hundred years, within the memory of one man's life, so many notable captains in war, for worthiness, wisdom, learning, as scarce to be matchable, no not in the state of Rome, in the compass of those seven hundred years, when it flourished much. Ascham. *Schoolmaster.*

It is certain, that as things now stand, the two great parties into which the community is unhappily split upon this mighty question, are resolved that we should have no system of education at all—no National Plan for Training Teachers, and thereby making the schools that stud the country all over, deserve the name they bear—no national plan for training young children to virtuous habits, and thereby rooting out crimes from the land. And this interdict, under which both parties join in laying their country, is by each pronounced to be necessary for the sacred interests of religion. Of religion! Oh, gracious God! Was ever the name of thy holy ordinances so impiously profaned before? Was ever before, thy best gift to man—his reason—so bewildered by blind bigotry, or savage intolerance, or wild fanaticism; bewildered so as to curse the very light thou hast caused to shine before his steps; bewildered so as not to perceive that any and every religion must flourish best in the tutored mind, and that by whomsoever instructed in secular things, thy word can better be sown in a soil prepared, than in one abandoned through neglect to the execrable influence of the evil Spirit?

And shall civilized, shall free, shall Christian rulers, any longer pause, any more hesitate, before they mend their ways, and attempt, though late yet seriously, to discharge the first of their duties? Or shall we, calling ourselves the friends to human improvement balance any longer, upon some party interest, some sectarian punctillo, or even some refined scruple, when the means are within our reach to redeem the time and do that which is most blessed in the sight of God, most beneficial to man? Or shall it be said that between the claims of contending factions in church or in State, the Legislature stands paralyzed, and puts not forth its hand to save the people placed by Providence under its care, lest offense be given to some of the knots of theologians who bewilder its ears with their noise, as they have bewildered their own brains with their controversies? Lawgivers of England! I charge ye, have a care! Be well assured, that the contempt lavished for centuries upon the cabals of Constantinople, where the council disputed on a text, while the enemy, the derider of all their texts, was thundering at the gate, will be as a token of respect compared with the loud shout of universal scorn which all mankind in all ages will send up against you, if you stand still and suffer a far deadlier foe than the Turcoman—suffer the parent of all evil, all falsehood, all hypocrisy, all discharity, all self-seeking—him who covers over with pretexts of conscience the pitfalls that he digs for the souls on which he preys—to stalk about the fold and lay waste its inmates—stand still and make no head against him, upon the vain pretext, to soothe your indolence, that your action is obstructed by religious cabals—upon the far more guilty speculation, that by playing a party game, you can turn the hatred of conflicting professors to your selfish purposes!

Let the soldier be abroad, if he will; he can do nothing in this age. There is another personage abroad, a person less imposing—in the eyes of some insignificant. The Schoolmaster is abroad; and I trust to him, armed with his primer, against the soldier in full uniform array.

Lord Brougham.

When the rich man is called from the possession of his treasures, he divides them, as he will, among his children and heirs. But an equal Providence deals not so with the living treasures of the mind. There are children just growing up in the bosom of obscurity, in town and in country, who have inherited nothing but poverty and health, who will, in a few years, be striving in generous contention with the great intellects of the land. Our system of free schools has opened a straight way from the threshold of every abode, however humble, in the village or in the city, to the high places of usefulness, influence and honor. And it is left for each, by the cultivation of every talent; by watching with an eagle's eye, for every chance of improvement; by bounding forward, like a greyhound, at the most distant glimpse of honorable opportunity; by redeeming time, defying temptation, and scorning pleasure to make himself useful, honored, and happy.

EDWARD EVERETT.

It is a noble and beautiful idea of providing wise institutions for the unborn millions of the West; of anticipating their good by a sort of parental providence; and of associating together the social and the territorial development of the people, by incorporating these provisions with the land titles derived from the public domain, and making school reservations and road reservations essential parts of that policy.

CALEB CUSHING.

Doubtless it will be urged that a general tax on property, for this object, (Public Schools,) would fall on many who have no children, and is therefore unjust. Carry out the principle of this objection, and it would overthrow the whole system of taxation. One would say that he never uses the public roads, and therefore he must not be taxed for them. Another never goes out in the evening, and therefore must not be taxed for lighting the streets. Another denies the right of all government and prefers to be without any protection but that of virtue, he must not be taxed for courts and legislatures. But taxation, we apprehend, is never based on the principle that the individual wants it for his direct benefit, but that the public wants it; for the public has a right in all property as truly as the individual, and may draw upon it for its own uses. And one of these uses is the education of the youth; for there is a very important sense in which children belong to the State, as they do to the family organization. Indeed, if we revert to the Jewish, Persian, Lacedemonian, and Roman States—all those ancient fabrics that rose in the youth time of nature—we see the State to be naturally endowed with a real instinct of civil maternity, making it the first care of her founders and constitutions, to direct the education of the youth. And why should she not? These are her heroes of the future day, her pillars of state and justice, her voters on whose shoulders she rests her constitution, her productive hands, her sentinels of order, her reliance for the security of life, liberty, and property.

DR. H. BUSHNELL.

For augmenting the aggregate amount of intelligence and mental power, in any community, the grandest instrumentality ever yet devised is the institution of Common Schools. The Common School realizes all the facts, or fables, whichever they may be, of the Divining Rod. It tries its experiments over the whole surface of society, and wherever a buried fountain of genius is flowing in the darkness below, it brings it above, and pours out its waters to fertilize the earth. Among mankind, hitherto, hardly one person in a million has had any chance for the development of his higher faculties. Hence, whatever poets, orators, philosophers, divines, inventors or philanthropists, may have risen up to bless the world, they have all risen from not more than one millionth part of the race. The minds of the rest, though equally endowed with talent, genius and benevolence, have lain outside the scope of availibility for good. These millions, with the exception of the units, have been drudges, slaves, cattle; their bodies used, their souls unrecognized. Ah, nowhere else have there been such waste and loss of treasure, as in the waste and loss of the Human Faculties. All spendthrift profusions, all royal prodigalities, are parsimony and niggardliness, compared with the ungathered, abandoned treasures of the human soul. As civilization has advanced, perhaps one child in a hundred thousand, and, in more favored nations, one child in ten thousand, has been admitted to the opportunities of knowledge. Forthwith, the men capable of constructing the institutions or the engines of human improvement and adornment appeared; and in numbers, too, far beyond the proportionate share of the constituencies from which they sprang. But if, instead of striking the fetters of prohibition from one in a hundred thousand, or from one in ten thousand, those fetters are stricken from all, and incitements to exertion and aids to self-development are supplied to all; then, immediately, quick as water gushes from unsealed fountains, Shermans rise up from the shoemaker's bench, Beechers come from the blacksmith's anvil, and Bowditches and Franklins from the ship-chandler's and the tallow-chandler's shop, and a new galaxy shines forth over all the firmament of genius. These are truths which the uneducated nations do not understand;—truths too, which the caste-men, whether of birth or of wealth, do not wish to understand. HORACE MANN. *Inaugural at Antioch College.*

The theory of our government is,—not that all men, however unfit, shall be voters,—but that every man, by the power of reason and the sense of duty, shall become fit to be a voter. Education must bring the practice as near as possible to the theory. As the children now are, so will the sovereigns soon be. How can we expect the fabric of the government to stand, if vicious materials are daily wrought into its framework? Education must prepare our citizens to become municipal officers, intelligent jurors, honest witnesses, legislators, or competent judges of legislation,—in fine, to fill all the manifold relations of life. For this end, it must be universal. The whole land must be watered with the streams of knowledge. HORACE MANN.

HISTORY OF COMMON SCHOOLS

IN

CONNECTICUT.

Before proceeding to the Fourth Period, from 1800 to 1838, we add a few facts, which may serve as notes to the preceding.

John Higginson the first teacher in Hartford of whom we have any information, was born in England, August 6th, 1616, and came to America with his father, Rev. Francis Higginson, first minister of Salem, Massachusetts, in 1629. He removed to Hartford early after the first settlement, and was a possessor of land there in 1639. After leaving Hartford, he became a preacher, and was chaplain at Saybrook fort; was afterward assistant to Mr. Whitfield, at Guilford, and subsequently his father's successor at Salem, where he remained until his death, in 1708, at the age of 92, having been a minister 72 years. His colleague, Rev. N. Noyes, in an elegy upon him, says:—he

> "For rich array cared not a fig,
> And wore Elisha's periwig;
> At ninety-three had comely face,
> Adorned with majesty and grace;—
> Before he went among the dead,
> His childrens' children children had."

He was succeeded at Hartford, probably immediately, by a Mr. Collins, whom Winthrop calls "a young scholar, full of zeal, &c." He had been preaching at St. Christopher's or Barbadoes, with considerable effect, and brought some of his converts with him. Hearing of Mrs. Ann Hutchinson's opinions while at Hartford, he warned a friend against them, but upon himself meeting her, at once became her disciple, and afterward her son-in-law. He was murdered by the Indians, together with her and her family, in 1643.

William Andrews, a native of Cambridge, Massachusetts, is the next teacher of whom any thing is known. He is the first mentioned in Hartford town records; where, date, 1643, it is ordered that he shall be paid sixteen pounds a year as salary. The site of his residence is now within the area of the Central Park, being the north corner of Elm Street and Trinity Place.

After Andrews, the next known teacher was Caleb Watson, a graduate of Harvard College, 1661. He taught for many years; from shortly after 1670 to (probably) near his death, in 1725. It should not be forgotten, however, that, during a portion of this early period, "Goody Betts" kept a dame school in the city. She was cotemporary with Higginson.

PERIOD V.

FROM 1842 TO 1845.

Governor Cleveland, in his annual Message to the Legislature in 1843, refers in terms of congratulation and commendation to the increased revenue of the School Fund, which, under the present and skillful administration of the Commissioner, "has reached the aggregate of $124,890.50, or one dollar and fifty cents for each person between the ages of four and sixteen." The Legislature passed an act relating to the division of property belonging to a district, which should be divided into two or more districts. Twelve resolutions remitting forfeiture of school moneys were passed.

Governor Baldwin in his annual Message in 1844, at the opening of the Legislature, introduces the subject of education as follows:—

Our institutions of learning, from the primary schools to those of the highest order for mental culture and discipline, have, in common with the institutions of religion, been objects of solicitude to the people of Connecticut from the earliest period of our history. And it is doubtless to the benign influence they have exerted, from generation to generation, over the minds and habits of our youth, that we are chiefly indebted for all that gives value to our social system, or safety in its administration. In a government like ours, where suffrage is nearly universal; where privileged classes among the electors are unknown; and where all the avenues to distinction are open alike to the children of the poor as of the rich;—an intelligent and virtuous population is equally essential to the correct administration of the laws, as to the wisdom of their enactment. For however well devised may be the laws of a state to secure the rights of persons or property from invasion, it is obvious that in a community where every elector may be called to apply them in the capacity of a juror, unless the tone of public sentiment is in harmony with the laws, they will afford but a feeble protection from injustice and crime. It is in the schools of New England that those habits of subordination and of reverence for the laws have been formed in the minds of her youth, by which they have generally been characterized and distinguished wherever the tide of emigration has borne them.

The school fund of this state, for which we are indebted to the provident foresight and wisdom of our statesmen of a former generation, reserving, while yet in their power, a portion of our western lands, for this noble object, now amounts $2,051,423.77. The dividend distributed to the schools during the past year has been $1.40 for each scholar between the ages of four and sixteen years, amounting to $117,717.60, in addition to the income of the deposit fund appropriated to this object in the several towns.

Notwithstanding this munificent provision for the education of our youth, it appears by the returns of the last census, that there were in the State of Connecticut in the year 1840, five hundred and twenty-six persons of mature age who were unable to read and write. What proportion of this number, if any, were natives of the state, the census affords us no means of determining.

It is much to be desired that our system of common schools should be improved and perfected, until by a regular gradation from the primary school to the highest seminary, the means of education which they afford shall be such, that not only the rudiments of learning may be imparted to all of our youth, but that the higher attainments in literature and science shall be within the reach of those whose talents and inclination may fit them for such pursuits. Then will our children, as they grow up together in every community, and form their characters in the same institutions, be practically taught that great lesson of republican equality, which, while it holds every citizen in strict subordination to the laws, recognizes no other distinctions than such as superior intelligence and virtue confer.

It gives me pleasure to be able to state that the salutary influence exerted upon our public schools by the late Board of Education and by the indefatigable efforts of their Secretary, still continues to be felt, and has given a new impulse to the cause of education, by bringing to the knowledge of all our districts the results of the experience of other enlightened states and countries.

Believing as I do that the prosperity of public schools, and seminaries of every grade, is identified with the best interests of our constituents, as well as with the glory and honor of the state, I shall cordially coöperate in any measures which your wisdom may devise for its promotion.

In pursuance of these suggestions, the Joint Standing Committee on Education reported the following Resolutions, which were passed:

Resolved, That his Excellency the Governor of this State be, and he hereby is authorized and empowered to nominate a committee of nine persons in this state, to be and to constitute a committee to report on the subject of education to the next General Assembly.

Resolved, That the person first named on this committee shall be chairman thereof—and that this committee, when constituted, shall take into consideration the state of common schools in Connecticut, and of the public mind respecting them, together with such plans and suggestions for their improvement as to them may seem calculated substantially to promote the usefulness of schools and the interests of education generally in the state, and shall report their doings herein to the next General Assembly.

Resolved, That the School Visitors in the several school societies shall lodge with the clerks of their respective societies such returns of the condition of each common school within their limits, in such particulars and at such times as the committee, mentioned in the foregoing resolution, shall specify and direct, together with a written report of their own doings, with such observations as their experience and reflection may suggest; and said clerks shall, at the expense of the several school societies, transmit the same, when required, to the chairman of the committee above named.

Resolved, That the Controller of Public Accounts be directed to draw an order on the treasurer for the sum of fifty dollars, in favor of the chairman of said committee, to be by him applied for time and expenses of said committee, and in remuneration thereof, after the purposes for which said committee has been raised, shall have been accomplished.

The Committee appointed under these Resolutions consisted of John T. Norton, Seth P. Beers, C. W. Rockwell, Isaac W. Stuart, John Johnston, Samuel Nichols, William T. Russell, and Edward Eldridge. This Committee attended to its duties, as will be seen below.

Governor Baldwin, in his annual Message in 1845, remarks:—

The subject of popular education, always of vital interest in a republican government, will never cease, I trust, to occupy a prominent place in the deliberations of the General Assembly of Connecticut. Blessed with a munificent fund, amounting $2,051,423.77, which distributed during the past year $117,730.20 among the 1,658 school districts into which our territory is divided, the people of this favored state have a solemn trust to perform, involving deep responsibility to future generations, as well as to the present, for its faithful execution. It will never be fulfilled in its spirit, until the standard of education in our common schools is elevated to the highest degree of excellence, which the ample means at our command will enable us to attain. A committee appointed under the resolution of the last session, to take into consideration the state of common schools and the interests of education generally in Connecticut, will submit to you the result of their investigations. The intelligence of the committee, no less than the importance of the subject, will commend their report to your attentive consideration.

The Committee, appointed by the governor, under the Resolution

of 1844, submitted a Report of 64 pages, from which the following extracts are taken :—

Your committee hoped to have met with a ready coöperation on the part of the visitors and clerks of the school societies. They regret to say, however, that, of 214 circulars issued, only fifty-nine have been replied to.

The cause of this neglect to comply with the wishes of the General Assembly, in a reasonable effort to promote the cause of education, can only be ascribed to indifference to the subject, and an unwillingness to do any thing more than the law imperatively requires, without compensation. This fact, alone, affords a forcible reason why some measures should be adopted to revive the spirit of our ancestors, and awaken a proper interest in a subject of such vital importance.

On comparing the returns now received with those made by the same societies in 1839, 40, and 41, your committee are forced to the conclusion that the cause of common school education is advancing so slowly in this state, that its progress is scarcely perceptible. Not to improve at all, whilst every thing is progressing around us, is in effect to go back. In 1839–40, and 41, a spirit was aroused, and improvements were begun, which promised to carry our state forward in the career of popular education. The effects of these efforts are still visible in many places. Whilst in others, disappointment has succeeded to defeat, and many who were willing to devote talent, time, and money, in order to give the poorest child in the state a thorough, common school education, have been ready to give up in despair.

Besides the evidence of these facts, afforded by the returns, your committee are confirmed in their opinion by extensive personal observation and inquiry. The supervision of schools by committees, is not nearly as thorough now as it was in former years, nor as it had become more recently under the system in operation in 1839–40, and 41.

DEFECTS IN THE SCHOOL SYSTEM.

1. *Want of well-qualified Teachers.*—This is one of the most common complaints, and must continue to be an evil, greatly hindering the progress of education, until teaching, by the encouragement it receives in the community, becomes a *profession.*

2. *Frequent change of Teachers.*—Most of the schools suffer from this cause. In consequence of the almost constant changes, common school education is not *progressive.* Year after year, as new teachers take charge of schools, the same ground is gone over as was traveled over the year previous; and parents wonder that their children make no greater improvement: or, which is not uncommon, conclude that they have learned all that they can, and detain them from school.

3, *Want of compensation to School Visitors.*—The frequent mention of this in the reports, is an indication that the need of more thorough supervision of the schools is very generally felt amongst those who are interested in the subject.

4. *Too great a variety of Books.*—This is a crying evil; subjecting the community to more unnecessary expense, annually, than it would cost to support a school for educating teachers, or a complete superintendence and supervision of schools, by means of state and town superintendents; besides greatly hindering the onward progress of the children in knowledge. It is very plain that the fewer classes there are in a school, the more time the teacher can devote to each.

5. *Want of Libraries, Globes, and Philosophical Apparatus, &c.*—Notwithstanding the cheapness and abundance of books, in consequence of the wonderful improvements in the art of printing, within a few years, and notwithstanding that science and art have furnished maps, globes, and philosophical apparatus, at such prices, as that every district in the state might procure them without inconvenience; yet these admirable auxiliaries to learning are found, (out of the cities,) so far as returns are received, only in ten school societies.

6. *Poor School-houses, &c.*—The reports, with few exceptions, speak of "*poor houses,*"—"*inconveniently furnished,*"—"*without the means of ventilation,*"—"*in bad repair,*"—"*badly located,*"—*and* "*without out-houses.*" These are all matters of importance, and entitled to serious attention.

The want of decent out-houses is disgraceful to a civilized community. Most of the reports say, "*wretched out-houses*" or "*none at all.*" Some large and respectable societies report "*none whatever.*" The health of children is often seriously injured on this account, as they are frequently prevented answering the calls of nature, or are subjected to an exposure alike detrimental to modesty and good morals.

7. *Want of interest in Parents and Guardians.*—This seems to be the crowning defect, or rather the foundation of all the evils connected with the schools.

8. *Small School Districts—Assessments on Children, &c.*—There can be no doubt that, in general, small districts are an evil, and should be avoided, except under peculiar circumstances. A *capitation* tax should also be avoided, as it operates often in keeping the children of the poor from school.

DIFFICULTIES IN THE WAY OF IMPROVEMENT.

After a careful examination of the reports received, and a due comparison amongst themselves of the state of the public mind, in the different sections which they represent, your committee are of the opinion that *no great change* can be effected, or new system introduced at present, with fair prospects of success. The principal difficulties in the way have already been alluded to, viz:—

1. A large number, perhaps a majority of the people, from long familiarity with, are blind to existing evils; and, not having informed themselves of the state of education elsewhere, are of opinion that our schools are the best in the world, and that no change is needed.

2. The people have so long been in the habit of depending mostly on the public for the support of common schools, that a tax is looked upon as unnecessary, fraudulent, and oppressive.

To these must be added,—

3. That in this state, unlike New York and Massachusetts, (and, indeed, all the other states, so far as your committee can learn,) the cause of common school education is connected with party politics—a thing fatal to any improvement in schools, especially where the great parties are so nearly balanced as in this state.

MEASURES RECOMMENDED.

Your committee are of the opinion, however, that two improvements can and ought to be made, viz:—

1. Our schools are at present in the condition of a body without a head, a government without a chief ruler, or an army without a leader. A manufactory can not be successfully managed without a superintendent, nor a farm without a leading mind to direct its operations. Every other department in the state has its head. Our schools, however, in which 80,000 children are in a course of education, intended to fit them for active life, are under no system of accountability. There is no one to whom reference can be made of disputed questions. No medium of communication with the schools through which information can be obtained and imparted. No means for infusing life and animation, and none for promoting uniformity.

Our ancestors were cast in a peculiar mould, and had a remarkable unity of purpose. The laws respecting education were strictly enforced, and public opinion would not tolerate neglect to educate children. That state of things has, in a considerable degree, passed away, and other means must now be adopted, than were all-prevalent then, to promote public instruction.

A *head* of the school department can be constituted without the creation of a new office, at a small expense, by appointing one of the existing state officers, say the Secretary of state, superintendent of common schools, *ex officio*, with authority to act in certain cases in interpreting and enforcing the laws relating to schools, and with authority to address questions, from time to time, to the School Visitors, calling for such information as the interests of education may require—said questions to be answered and returned with the annual enumeration of children, and the distribution of the public money to be dependent on such returns.

In order to enable the secretary of state, or other officer, to discharge this ad-

ditional duty, he might be authorized to employ a clerk or assistant, at a moderate salary, and might be allowed a small sum for printing, postages, &c. A place of deposit would thus be secured for books, correspondence, and returns, valuable for future reference, and an efficiency would probably be given to the whole system, which it greatly needs, and which, it is believed, can not be produced, by the mere enactment of laws and regulations, without a proper officer to enforce them.

2. Your committee recommend, that each Board of Visitors be required to appoint one of their number *an Acting Visitor*, to examine teachers, and visit schools, in company with one or more members of the board, when their attendance can be obtained. Said Acting Visitor to visit each school twice during each term, spending not less than half a day at each visit, and to make an annual report of the condition of the schools to the head of the department. Said Visitor to receive one dollar a day whilst actually engaged in these services, out of the treasury of the town in which the society is located.

There is one other improvement which your Committee deem of great importance, but which they do not think the present state of the public mind would justify, viz.:—*the establishment of a Normal School, or Teacher's Seminary.*

Teaching is an *art*, subject to certain rules and principles, like any other art. It is true, that individuals may attain some degree of skill in teaching, without having had regular and systematic instruction in the art; as some men do in the arts of the painter, the carpenter, or the smith, without having served a regular apprenticeship. It is true, too, that every one gets *some* idea of teaching while he is himself obtaining the rudiments of knowledge. But who would entrust an important work in building, machinery, or painting, or send a son to serve an apprenticeship, with an artisan who had not been regularly taught his profession, unless, indeed, he were satisfied that, by long study and experience, he had fully made up for the deficiency in his early education.

How much more, then, should we hesitate to commit the education of our children to unskillful hands—to those who have barely sufficient attainments to entitle them to the certificate required by law, without having had the slightest instruction or experience in the art of teaching, and who even acquired the rudiments of knowledge from those who were themselves exceedingly deficient both in art and learning.

By far the greater part our teachers, when they begin to instruct, are of this character. Many never teach but a single season. Others, who continue in the profession, change their school, season after season, giving no satisfaction to their employers, and deriving none themselves from their pursuit. A few, only, become successful teachers, and these soon find their way, as has before been said, into such common schools as duly appreciate their talents, or are employed in private schools and academies.

Your Committee are of the opinion that *true economy*, as well as the higher inducement, of the best interest of the state, in the improved education of its children, would be promoted by the establishment of a Normal School. The annual expense of a school adapted to this state would probably be about $4,000, or 5 cents a year for each child in the state. The public, however, have at present but little information on the subject. There can be no doubt that, sooner or later, these institutions will be deemed an indispensable part of every common school system.

Your Committee can not close, without expressing their deep sense of the importance of an improvement in common school education in this state. Though narrow in territory, and with a small and not rapidly increasing population, Connecticut, for a long course of years, exercised an important influence in the Union. Her rank and influence, however, must rapidly decline, as other states improve in knowledge and increase in population, unless by the superior intelligence of her people and the wisdom of her counsels, she command a respect, which mere extent of territory, and a numerous but unenlightened population can not command.

In pursuance of these recommendations, the Joint Standing Committee on Education reported a Bill, which was passed by a very large majority in both Houses

An Act in addition to and in alteration of an Act concerning Common Schools, 1845.

Section 1. *Be it enacted by the Senate and House of Representatives in General Assembly convened*, That the Commissioner of the School Fund shall be *ex-officio* Superintendent of Common Schools, and that it shall be his duty in that capacity, to exercise a general supervision over the common schools of the state, to collect information from School Visitors in the manner hereinafter to be mentioned, and from other sources, and to prepare and submit an Annual Report to the General Assembly, containing a statement of the condition of the Common Schools of the state, plans, and suggestions for the improvement and better organization of the Common School system; and all such matters relating to his office and to the interests of education, as he shall deem it expedient to communicate.

2. In all cases of forfeiture of public money under the thirty-first and thirty-second sections of the Act to which this is an addition, application shall be made to the Superintendent of Common Schools, who shall examine the facts of each case, and according to its equity decide on the right of the applicants to receive the money so forfeited, and the same shall be paid as if no forfeiture had occurred, on his certificate to the Controller of Public Accounts, in approbation of such payment.

3. The visitors of each school society, shall, immediately after their appointment, meet and choose one or more of their number to be the acting school visitors of the society, for the year ensuing.

4. It shall be the duty of the acting school visitor or visitors of every school society, to visit every common school in said society, in company with one or more of the visitors, or of the district committee, if such attendance can be obtained; and such visits shall be made twice at least, during each season for schooling, in conformity with the provisions of the Act to which this is an addition. It shall be his or their duty (unless otherwise directed by the visitors) to spend at least half a day in each school visit. It shall also be his duty to make a full report of the condition of the common schools of said society, and of all important facts concerning the same, to the Superintendent of Common Schools, before the expiration of the year for which he is appointed, and to answer in writing all inquiries that may be propounded to him or them on the subject of common schools by said Superintendent. He or they shall also prepare an abstract of such report to be read at the annual meeting of said society, or (if the visitors shall so direct,) at the annual meeting of the town in which said society is situated.

5. The acting school visitor or visitors of any school society shall receive for the time actually spent in the performance of the duties prescribed in this Act, the sum of one dollar each per day, to be paid out of the treasury of the town in which the school-houses of the schools visited by him or them are situated; such payment to be made from the income of the town deposit fund, or in such manner as the town shall direct. *Provided*, that he or they shall have made his or their annual report in the manner prescribed in the preceding sections; and *provided further*, that his or their account shall be approved by the visitors of the society.

PERIOD VI.

from 1845 to 1849.

The Report of the Select Committee and the action of the Legislature in 1845, was followed by immediate and beneficial results. The circulation of the Report and of a Circular of the Superintendent, Hon. Seth P. Beers, who entered into the requirements of the law with a sincere desire to accomplish something for the benefit of the common schools, arrested the attention of school officers and of the

public generally. At the opening of the Legislature, in 1846, Gov. Toucey, thus introduces the subject:—

The education of youth, in a free state, is ever a subject of momentous interest. Here we lay the foundations of that improved society, supposed to exist, and of that free government and all its kindred institutions, which rest upon man's capacity for self-government. Without disparaging the higher seminaries of learning, I would especially commend to your attention the Common Schools, in which the people generally are taught, and which are more particularly under their immediate care and superintendence. If these are placed in the highest practicable condition, the higher institutions will be sure to be provided for. If there be any pecuniary sacrifice necessary to introduce any well-attested improvement, or to save these schools from lagging behind the age, let it be made with that generous, self-sacrificing devotion, which becomes an educated community. But in all our legislation let us never lose sight of the fundamental principle, which, with certain exceptions, we have ever acted upon, that these common schools should be under the superintending care and control of the parent. If the parent has not an unfailing interest in the education of a beloved child, in which the state may justly confide, I know not to what quarter we should look for it.

More especially is it desirable that some feasible plan should be devised, which would be sustained by public opinion, for enlarging and improving, as far and as fast as practicable, the qualifications of instructors, to the end that the higher branches may be opened to the children of parents in moderate pecuniary circumstances. For lack of it, many of the brightest minds, many of the most largely endowed intellects, which might otherwise have adorned and blessed society, are left obscured by the sad influences of poverty. Let that noble principle of our institutions, by which the humblest citizen is placed upon a footing of political equality with the highest, be extended, in some measure at least, to his children, so that when they seek an acquaintance with the higher branches of learning, no insuperable barrier may be in their way.

The School Fund, that source of just pride to the people of this state, with its capital of $2,070,055.01, dividing the present year the sum of $119,385 to 85,275 children, between the ages of four and sixteen, furnishes strong evidence of a just public sentiment, which may be safely relied on for any wise and salutary legislation, in furtherance of the great cause of education.

In the course of the session Mr. Beers submitted the "*First Annual Report of the Superintendent of Common Schools to the General Assembly, May Session*, 1846." The Report itself is brief—occupying 14 pages, but with the accompanying documents makes a pamphlet of 200 pages, and for the light these documents throw on the actual condition of the schools, it is one of the most valuable school documents ever published in the state. The following extracts include the substance of the Report.

PLANS FOR THE IMPROVEMENT OF COMMON SCHOOLS.

To say that the system is not susceptible of improvement, would be to claim for it an exemption from the nature of all human institutions. In the course of our legislative history, our school laws have been from time to time modified, and it would be strange, if in the light of the experience of the last twenty years, during which time the attention of many intelligent statesmen, and of legislatures, in other states and countries have been devoted to the subject, that some further modification could not be made in our mode of supervising and conducting common schools. That there are defects in the practical operation of our school system, in the construction of school-houses, the attendance and classification of scholars, in the qualifications of teachers, and their mode of discipline and instruction, in the books and apparatus for illustration, in the parental and public inte-

rest manifested in the administration of the system, is evident from the testimony of the school visitors, not of one society, but of more than two-thirds of all the school societies in the state. That there are remedies for these defects is evident from the fact, that they have been remedied to some extent in other states, and in some districts and societies in our own state; and that the visitors practically familiar with the evils as teachers or committees, for many years; and in societies remote from each other, and without any opportunity for consultation, agree in the recommendations which they submit.

The following is a summary of the *defects* as presented by the School Visitors, in the operation of our school system, and the *remedies* proposed by them, in their reports to the Superintendent; extracts from which are hereto appended.

First—The apathy of parents and the public generally, as manifested in not visiting the schools, and attending school meetings, when school committees are to be appointed, and appropriations voted for teachers, school-houses, apparatus, &c.

The remedies proposed by them are—

1. A regular system of reports as to the condition of the schools and their improvement, both to the school society and the state, printed and circulated widely among parents and school officers.
2. Lectures and discussions by school officers and others, on topics connected with the method of instruction and discipline, school-houses, books, apparatus, and above all, the qualifications of a good teacher.
3. The circulation of Educational Tracts.
4. The publication of a Common School Journal.

Second—The employment of *cheap*, instead of well-qualified teachers.

To supply this want, the following remedies are by them proposed.

1. The establishment, by the state, of one or more Normal Schools for the practical training of such young men and young women as show the requisite native talent and tact, to the best methods of school government and instruction.
2. The holding of Teachers' Institutes or Conventions for one or two weeks, in the spring and autumn, where young and inexperienced teachers may have an opportunity to review their studies, and receive practical instruction from older and experienced teachers.
3. An association of the teachers of a town or county, for an evening or a day, or a longer time, for discussions and lectures on topics relating to their profession.
4. A more thorough system of examination of all candidates to teach, by a Senatorial District, or County Board of Examination.
5. A system of visitation, by a County or Senatorial District Board, and a faithful report exposing poor teachers and naming with commendation those teachers who are faithful and successful.
6. Higher wages.

Third—The constant change of teachers from summer to winter and from winter to summer.

The remedies proposed by them are,

1. Higher compensation to induce good teachers to remain in the same place.
2. A classification of the schools, so as to have occasion for a smaller number of male teachers in the higher department, and a larger number of female teachers in the primary schools, for the year round.

Fourth—The want of better school-rooms and better out-door accommodations.

The remedies which they propose are,

1. An exposure, in faithful reports and lectures, of the injury done to the health, morals, manners, and intellect of scholars and teachers, by the present neglect.
2. The erecting and fitting up of a few model school-houses, yards, &c., in each county.

Fifth—The want of uniformity of books.

The remedies proposed by them are,

1. The appointment of a State Committee to examine all the books before the public and recommend the best.
2. The appointment of a State Committee to *prescribe* the best books, and make it the condition to the enjoyment of the public moneys, that these books and no others shall be used in the schools.
3. The prescribing, by the school visitors, of such regulations as shall tend to a uniformity in all the schools of the same society.

Sixth—The irregular attendance of children at school.

The remedies they propose are,

1. The distribution of the moneys to the districts according to the amount of attendance in each, so as to make it the interest of parents and districts to see that the children are regular.
2. Securing the coöperation of parents.

Seventh—An unwillingness on the part of districts, school societies, and towns, to raise money by tax for the compensation of teachers, payment of school visitors, and building and repairing of school-houses.

The remedies proposed are,

1. The agitation of the subject by lectures and reports.
2. The apportionment and payment of the dividends of the School Fund to such societies and districts only, as will raise a specific sum by tax, and keep the schools in a school-house approved by the school visitors.

Eighth—The inability of small districts to maintain a good school-house, and employ a good teacher for a sufficient length of time.

The remedies they propose are,

1. To assist the small districts by a larger distributive share of school money.
2. To abolish all small districts, where it can be done without serious inconvenience.
3. The more extensive employment, by such districts, of female teachers, in winter as well as in summer.

Ninth—The want of a more thorough system of supervision, that there may be a greater uniformity and vigor in carrying out the provisions of the School Act, in different districts; and a sense of responsibilty to the Legislature, for the manner in which the large amount received from the state is expended.

The remedies they propose are,

1. The appointment of a Commissioner, whose sole business it shall be to visit schools, deliver addresses, confer with school committees, circulate information, furnish plans of school-houses, and submit a detailed report of the condition of the schools annually.
2. The establishment of a Board of Education, with a member for each county, and with power to appoint a Secretary, who shall devote his whole time to these duties.
3. The appointment of an officer for each county or senatorial district, to visit the schools within his limits and report to the Legislature or the State Superintendent.
4. The appointment of a single officer for each town or school society, to have the supervision of the schools in that town or society.

Tenth—The existence of numerous private schools of the same grade of the common schools; and of the patronage of the former by the educated and wealthy, to the neglect of the latter.

The remedies proposed by the visitors are,

1. To make the common school the best school.
2. To establish a common school, of a higher order than the district school, in every town and in every large village.

Eleventh—The want of suitable apparatus, and means of visible and practical illustration.

The remedies proposed are,

1. A small appropriation by the state to each district which will raise as much more, and expend both sums in the purchase of these articles.

2. Lectures on the advantage of such means of illustration.

In conclusion the Superintendent would observe, that while he entertains no doubt as to the importance of having a regular system of returns made to the Legislature by school districts and school societies, respecting the condition of the common schools within their limits for whose support the state makes a larger appropriation than is made by any other state; and that to secure uniformity and efficiency in this and other requirements of the School Law, and keep the Legislature informed of the progress of improvement in schools in other states and countries, some officer or department must be charged with these specific duties; he is no less certain that the financial duties of the Commissioner of the School Fund, are too numerous, and too diverse to be blended with those of the common schools. The supervision of the common schools, should, therefore, in his opinion, be transferred to some other department or officer.

Appended to the Report of the Superintendent was a Prize Essay, on the "*Necessity and Means of Improving the Common Schools of Connecticut*," the history of which is thus given by the Superintendent:—

Since making the foregoing Report, the attention of the Superintendent has been called to a manuscript Essay "On the Necessity and Means of improving the Common Schools of Connecticut," to which has been adjudged the premium offered in the following notice:—

Premium of $100.—A premium of *One Hundred Dollars*, which the undersigned have been authorized to offer, will be paid for the best Practical Essay, adapted to general circulation, presenting the most simple and efficient plan for improving the Public Schools of Connecticut, and for adding to the Public Schools in *Cities*, a department for instruction in the higher branches of education.

Competent judges will be selected to decide on the merits of the Essays which shall be transmitted to the undersigned on or before the 28th of April next.

The names of the authors to be sent in sealed envelopes, of which that one only will be opened which accompanies the Prize Essay.

Thomas Day,
Thomas H. Gallaudet,
William D. Ely.

Hartford, *March* 2, 1849.

Twenty-seven Essays were sent in. These were placed in the hands of Rev. George Burgess, Chairman of the School Visitors of the First School Society of Hartford, and Mr. Nathan L. Gallup, Principal of the Centre District School, Hartford, who adjudged the prize to the author of this Essay. Without having had time to examine the Essay with particular attention, and without assuming any responsibility, either for the matter or expression of the views which it contains, but as it relates "to the interest of education" in the state, and from respect to the benevolence which prompted the offer, and the practical judgment of the gentlemen who have acted as judges, the Superintendent has concluded to append the Essay to this Report, and commend it to the consideration of the Legislature.

To this, as matter of history, it may be stated, that the premium was offered and paid (as well as the bill for the printing of one thousand copies in a pamphlet form) by James M. Bunce, Esq., of Hartford; and the Essay was written by Prof. Noah Porter, of Yale College, at the time residing in Springfield, Mass. The Essay was

printed and widely circulated, with the Report of the Superintendent and in a separate pamphlet, among school officers, clergymen of every denomination, and the friends of educational improvement generally, in the state. It was eagerly read, and its bold, eloquent, and yet practical exposure of existing defects, and desirable remedies in our system, arrested public attention, and called forth vigorous efforts in the right direction. We give below the Prize Essay as originally published.

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VII. SCHOOLS AS THEY WERE IN THE UNITED STATES

SIXTY AND SEVENTY YEARS AGO.

Second Article.

LETTER FROM SALEM TOWN, LL.D.

AURORA, N. Y. *September*, 1863.

My Dear Sir,—In compliance with your request, I transmit this brief article, comprising such reminiscences of schools, school-houses, school-books, and school-teachers as they were some seventy years ago.

It must, however, be remembered, that I am not describing what did or did not exist in large cities or large villages, but in rural districts, and more especially that in which I lived. Nor could it be expected that I should know any thing of other districts in the town at the time of my earliest school-days. It is nevertheless highly probable, that educational deficiencies were much the same in most, if not all country districts, as the same destitution of needful facilities as to school privileges, was rather general than local. A large portion of the male population, able to bear arms, had for seven years been deprived of educational privileges, and those at home were compelled to labor assiduously for their own support, and that of our armies in the service of their country. Under these circumstances, few individuals could be expected to qualify themselves for teachers; hence the choice of the people was a matter of necessity between teachers poorly qualified, or none at all.

I make these prefatory remarks as a reasonable apology, both in behalf of the teachers themselves, and of that generation which grew up under such educational privations as the state of the country rendered unavoidable.

My First Teacher, School-books and School-house.

My early school days commenced just after the close of the American revolution, and my recollections as to school matters, though some seventy five years gone by, are quite distinct. One very substantial reason for this, is found in the fact, that physical appliances were frequently employed by teachers in those days, to drive ideas into the heads of little urchins, and impressions thus made are not easily forgotten.

I was born in Belchertown, Mass., March 5th, 1779, and was probably sent to school when six or seven years old. My teacher was a soldier of the revolution, living in the district. The first school-house, if such it could be called, was a room twelve or fourteen feet square, in an old dilapidated dwelling house. The seats were slabs from a saw-mill, and with legs making them so high that small scholars needed a short rope to anchor their feet to the floor. But there we must sit, however painful the position. The teacher was a large slab-sided man, who always sat in an old fashioned arm chair, about the center of the room. By his side was a small round table, and a long birch rod. (I can fancy I can

see exactly how he looked.) To avoid the trouble of stooping down, he kept the butt-end of his rod resting on his chair, and we had sensible evidence oftentimes repeated, that its length was sufficient to reach most of us without requiring the teacher to rise, which he seldom did when once seated, till the close of school.

With these surroundings and discomforts, I was taught the alphabet in the New England Primer, from *A to ezard and ampersand.* All the letters in *course* must be *said* up and down just so many times each day.

The next book in this school was Dilworth's *Spelling-Book*, in which, *tion* and *sion* were *two* syllables. In this book we were drilled for a very long time. From Dilworth we went to the *Psalter*, (the book of psalms,) so called. Nor had we any intermediate book of easy lessons. The *Psalter* was in our school the only reading book then used, with the exception of some few lessons in the Primer and Dilworth. The school consisted mainly of small scholars, some of them, perhaps, sent to school to get them out of the way. The teacher owned a small arithmetic, name not recollected. From this he gave out questions, if perchance any lad was old enough to encounter the ground rules. Slates and pencils were unknown. Paper was imported, scarce and costly, and those who could not procure it, cyphered on *birch bark*, and that was the article on which I, in due time first made figures. I often heard old people say my first teacher was *great in figures;* that he could cypher as far as the rule of three, and compute interest, and they had no doubt he could actually tell how many barley corns it would take to reach round the earth!!

Such in the main comprise my earliest recollections of my first teacher and my earliest school days in 1786—7. What other teachers were, and what advantages, more or less other schools in the vicinity enjoyed at this time, I had no knowlege.

Progress in Teachers, Books, &c.

The next school-house where I attended was an old building near a mill-pond and saw-mill, with no dwelling near by. The teacher was an Englishman, and said to be well educated, but half crazy. Folks said he was love-cracked, and I wondered what that meant.

His mode of government was unique. When the scholars became noisy, he would stamp his foot upon the floor with tremendous power, and commence pounding his own head with his fist, exclaiming, "Children, if you do not behave better, I will go right off and leave you." This for the time being would frighten the children into silence.

School-books were somewhat improved. Dr. Webster's *Elementary Speller*, was about this time introduced. It was published in 1783, and I believe the first school-book published on this side of the Atlantic. Perry's *Speller*, was offered, but I think not much used. Webster's readers were now used wherever his speller was found.

About this time a new school-house was built in the district, in a pleasant place, and with comfortable fixtures. A new teacher also was engaged, and I take pleasure in recording his name, for I was then at an age to appreciate instruction. Samuel Greene, (father of S. S. Greene, now a Professor in Brown's University in Providence, R. I.) purchased a farm in the same district in which my father lived. He was in all respects well qualified, eminently successful as a teacher, and universally beloved by his pupils. His name to this day, is with

me, in sweet remembrance. Such was his popularity that he was soon called to another district two-and-a-half miles distant, and thence again to the middle of the town, distant from my home three miles. Notwithstanding these removes, by consent of my father, I followed him through rain or snow, day by day, wherever he taught. I think this must have been in 1792—3. Considerable improvement had been made as to the qualifications of teachers, and the increased number of school-books. At different times and places where Mr. Greene taught, Alexander's *English Grammar* and an abridgement of Pike's *Arithmetic* were brought into use. The *Columbian Orator* was added to the readers, which made up something of a variety in reading matter.

Under Mr. Greene's administration, decimal and vulgar fractions, and many higher branches of arithmetic were thoroughly studied. Grammar and Geography were made regular studies for the more advanced scholars. A geography about the size of a speller, written by questions and answers, and without maps, was published by Nathaniel Dwight of Hartford, and another small work by Jediah Morse, having four maps, each about the size of a man's hand. Murry's *English Grammar and Readers* also came into general use in our schools.

Such, as far as I can recollect, were the more common school-books within the region of my acquaintance up to 1800, the time I left my native state.

The time during which schools were taught in the rural districts, (and such were most of them at the close of the revolution,) was from eight to twelve weeks, and that in the winter season. In the summer there were few if any schools, as all who could hoe a hill of corn, or do any house-work were required to labor. At this early period, the attainments of those who had no further instruction than was received in district schools, were limited to very few branches. The reasons for which are quite obvious, viz., the inability of the teacher on the one part, and the limited time of attendance allowed by the parent on the other. Spelling, reading, writing, and arithmetic as far as the rule of three, with simple interest, were the main branches. It was, however, thought by many parents unnecessary to have their daughters taught in arithmetic, as in their view it would be of little or no use to them.

Fractions were out of the question, and the study of grammar and geography was much neglected, as most parents thought it to be a mere waste of time. Most of the men and women of adult age, who came up during the Revolution, and had now become heads of families, had enjoyed few advantages for intellectual improvement, and did not seem to appreciate the benefits their children might derive by studying those branches of which they themselves had little or no knowledge.

Thus briefly I have noted my own personal reminiscences, observations, and experience, in the immediate locality of my birth place, and from my earliest recollections. And when I look on educational matters at the two extremes of my life, and contrast those extremes, as then and now, I am somewhat amazed that so great a change should have occurred during my own life time. Nevertheless perfection in all educational facilities has not as yet been reached. What has been accomplished in the past, is most surely prophetic of the future. Henceforth then, let the watchword be onward and upward.

S. Town.

To Hon. Henry Barnard.

LETTER FROM JOSIAH QUINCY.

BOSTON, *December* 1*st*, 1860.

DEAR SIR,—You ask briefly the position of Phillips Academy as to studies, text-books, methods, and discipline. That academy was founded in the year 1778. I was sent to that academy within a month after its opening, in May, 1778, being the seventh admission on its catalogue. I had just then entered upon my seventh year, and was thrust at once into my Latin at a period of life when noun, pronoun, and participle, were terms of mysterious meaning, which all the explanations of my grammars and my masters for a long time vainly attempted to make me comprehend. But the laws of the school were imperious. They had no regard for my age, and I was for years subjected to the studies and discipline of the seminary, which, though I could repeat the former, through want of comprehension of their meaning, I could not possibly understand. I was sent to the academy two years at least before I ought to have been. But William Phillips was my grandfather; it was deemed desirable that the founders of the academy should show confidence in its advantages; I was, therefore, sent at once, upon its first opening, and I have always regarded the severe discipline to which I was subjected, in consequence of the inadequacy of my years to my studies, as a humble contribution toward the success of the academy.

The course of studies and text-books I do not believe I can from memory exactly recapitulate; I can not, however, be far out of the way in stating that "Cheever's Accidence" was our first book; the second, "Corderius;" the third, "Nepos;" then, if I mistake not, came "Virgil." There may have been some intermediate author which has escaped my memory, but besides Virgil I have no recollection of any higher author.

Our grammar was "Ward's," in which all the rules and explanations are in Latin, and we were drilled sedulously in writing this language far enough to get into the university. Our studies in Greek were very slight and superficial. Gloucester's Greek Grammar was our guide in that language, and a thorough ability to construe the four Gospels were all required of us to enter the college.

These are the best answers I can give to your inquiries on the subject of "studies and text-books," but I am not confident that my memory serves me with exactness. Our preparation was limited enough, but sufficient for the poverty and distracted state of the period.

Of "methods and discipline," for which you inquire, I can only say that the former was strict and exact, and the latter severe. Pearson was a convert to thorough discipline; monitors kept an account of all of a student's failures, idleness, inattention, whispering, and like deviations from order, and at the end of the week substantial rewards were bestowed for such self-indulgences, distributed upon the head and hand with no lack of strength or fidelity.

In that day arithmetic was begun at the university. The degree of preparation for college, and the amount of the studies within it, are not worthy of remembrance when compared with the means of acquirement now presented to the aspiring student.

I am, very truly,
Your friend and servant,
JOSIAH QUINCY.

TO HON. HENRY BARNARD, LL. D.

LETTER FROM WILLIAM DARLINGTON, M.D., LL.D.

WEST CHESTER, PENN. *Dec.* 21*st.* 1860.

My Dear Sir,—At your request, I propose to attempt a brief and hasty sketch of my acquaintance with, and reminiscences of the *Country Schools*, and their condition, some sixty-five or seventy years since, in the south-eastern corner of the state of Pennsylvania; more particularly the school at Birmingham, Chester county, where the limited instruction of my youthful days was chiefly acquired.

My earliest recollections of the school to which I was sent, go back to that trying period of loose government, rusticity, and scarcity experienced in the interval between the War of Independence and the adoption of the Federal Constitution; and if it were given me to wield the pen of *Tom Brown of Rugby*, I might peradventure furnish some graphic details of our rural seminaries of learning in those days of general destitution. But, under present circumstances, I can only offer the imperfect narrative of incidents and observations, as retained in an almost octogenarian memory.

School-houses and Teachers.

At the time when I was first sent to school—say in 1787–8—school-houses were rare; and there was little or no organization for their maintenance. The country round, having been recently ravaged by a hostile army, was scantily supplied with teachers, who occasionally obtained schools by going among the principal families of the vicinage, and procuring subscribers for a quarter's tuition of the children on hand. Those who were too young to be serviceable on the farm were allowed to go to school in the summer season; but the larger ones (*expertus loquor*) could only be spared for that purpose during winter. The extent of rural instruction was then considered to be properly limited to what a worthy London alderman designated as the *three R's*, viz., "Reading, Riting, Rithmetic." To cipher beyond the *Rule of Three* was deemed a notable achievement and mere surplusage among the average of country scholars. The business of teaching, at that day, was disdainfully regarded as among the humblest and most unprofitable of callings; and the *teachers*—often low-bred, intemperate adventurers from the old world—were generally about on a *par* with the prevalent estimate of the profession. Whenever a thriftless vagabond was found to be good for nothing else, he would resort to *school-keeping*, and teaching young American ideas how to shoot! It was my good fortune, however, to have a teacher who was a distinguished exception to the sorry rule referred to. John Forsythe was a native of the Emerald Isle, born in 1754, received a good English education at home, and while yet a young man, migrated to the county of *Chester*, in the land of Penn., where he became an excellent schoolmaster. When he arrived in our quakerly settlement, he was a gay young Presbyterian, dressed in the fashionable apparel of the world's people; and being withal musical in his taste, was an expert performer on the violin. He soon, however, adopted the views and principles of the "Friends," among whom he remained, married one of the society, and was ever recognized as an exemplary and valuable member.

As the head and spirit-master of the school, at Birmingham meeting-house, established under the auspices of the Quaker society, he taught for a number of

years, and always applied himself *con amore* to his arduous duties. He accomplished more in exciting a taste for knowledge and developing young intellects, than any teacher who had theretofore labored in that hopeful vineyard. He effectually routed the lingering old superstitions, prejudices, and benighted notions of preceding generations, and ever took delight in introducing youthful genius to the bright fields of literature and science. The young men of his day, who have since figured in the world, were deeply indebted to John Forsythe for the aid which he afforded them in their studies, as well for the sound doctrines which he inculcated; and some few of them yet survive to make the grateful acknowledgment.

When the noble Quaker institution at *West-town* was erected, near the close of the last century, the skill and experience of John Forsythe were put in requisition, until it was fairly inaugurated; after which he retired to his comfortable farm, in East Bradford, where he passed a venerable old age, until his 87th year, superintending agricultural employments, and in manifesting a lively interest in the progress of education among our people. No instructor has labored in this community more faithfully, nor with better effect. None has left a memory more worthy to be kindly cherished.

The old *school-house* at Birmingham was a one story stone building, erected by men who did not understand the subject; and was badly lighted and ventilated. The *discipline* of that day (adopted from the mother country) was pretty severe. The real *birch* of the botanists not being indigenous in the immediate vicinity of the school, an efficient substitute was found in young apple tree sprouts, as unruly boys were abundantly able to testify.

School-books.

The *school-books* of my earliest recollection were a cheap English spelling book, the Bible for the reading classes, and when we got to ciphering, the "*Schoolmasters' Assistant.*" The "*Spelling Book*" and "*Assistant*" were by Thomas Dilworth, an English schoolmaster at Wapping. The "Assistant" was a useful work, but has long since disappeared. The "counterfeit presentment" of the worthy author faced the title-page, and was familiarly known to every school-boy of my time. The Spelling Book contained a little elementary grammar, in which the English substantives were through all the cases (genitive, dative, etc.) of the Latin. But *grammar* was then an unknown study among us. Dilworth's "*Spelling Book,*" however, was soon superseded by a greatly improved one, compiled by John Pierce, a respectable teacher of Delaware county, Pennsylvania. This comprised a tolerable English grammar, for that period, and John Forsythe introduced the study into his school with much zeal and earnestness. Intelligent employers were made to comprehend its advantages, and were pleased with the prospect of a hopeful advance in that direction; but dull boys and illiterate parents could not appreciate the benefit. Great boobies often got permission, at home to evade the study, but they could not get around John Forsythe in that way. They would come into school with this promised indulgence, and loudly announce, "Daddy says I need'nt *larn grammar;* it's no use:" when the energetic response from the desk was, "I don't care what daddy says. He knows nothing about it; and I say thou shalt learn it!" and so some general notion of the subject was impressed upon the minds even of the stupid; while many of the brighter youths became excellent grammarians.

In this *Friendly* seminary we were all required to use the *plain language* in conversation, being assured that it was wrong, both morally and grammatically, to say *you* to one person. Our teacher contrived a method of his own for mending our cacology, even at our noonday sports. He prepared a small piece of board or shingle, which he termed a *paddle;* and whenever a boy was heard uttering bad grammar, he had to take the paddle, step aside, and refrain from play, until he detected some other unlucky urchin tresspassing upon syntax; when he was authorized to transfer the badge of interdiction to the last offender, and resume his amusements. It was really curious to observe how critical we soon became, and how much improvement was effected by this whimsical and simple device.

Pierce's "*Spelling Book*" kept its position in our school for several years, but was at length superceded, in the grammatical department, by a useful little volume, prepared by *John Comly*, of Bucks county, Pennsylvania. *Lindley Murray* and others prepared elaborate grammars, which were successively introduced, as our schools improved or created a demand; and so rapidly have the book-making competitors in that department multiplied that their name is now legion, and the respective value of their works is known only to experts in the art of teaching.

Excellent works in *Reading* and *Elocution* are now so abundant and well known in all our respectable seminaries, that they need not to be here enumerated. One of the best and most popular of those works, some half century or more since, was a volume entitled "*The Art of Speaking*," compiled, I think, by a Mr. Rice, in England.

But, as we have now reached the age of academics, normal institutes, and schools for the people, I presume you will gladly forego a further extension of this prosy narrative, so little calculated to interest a veteran in the great cause of education. I have ever been a sincere friend and advocate of the blessing; but, unfortunately, my acquaintance with it has been mainly limited to a humbling consciousness of my deficiencies in the ennobling attainment.

Very respectfully,
WM. DARLINGTON.

To HON. HENRY BARNARD, LL.D.

SCHOOLS IN PHILADELPHIA.

The following picture of the internal economy of one of the best schools of Philadelphia, is taken from Watson's "*Annals of Philadelphia and Pennsylvania.*"

"My facetious friend, Lang Syne, has presented a lively picture of the 'schoolmasters' in those days, when 'preceptors,' and 'principals,' and 'professors' were yet unnamed. What is now known as 'Friends' Academy,' in Fourth street, was at that time occupied by four different masters. The best room downstairs by Robert Proud, Latin master; the one above him, by William Waring, teacher of astronomy and mathematics; the east room, up-stairs, by Jeremiah Paul, and the one below, 'last not least' in our remembrance, by J. Todd, and severe he was. The State House clock, being at the time visible from the school pavement, gave to the eye full notice when to break off marble and plug top, hastily collect the 'stakes,' and bundle in, pell-mell, to the school-room, where, until the arrival of the 'master of scholars,' John Todd, they were busily

employed, every one in finding his place, under the control for the time, of a short Irishman, usher, named Jimmy M'Cue. On the entrance of the master, all shuffling of the feet, 'scrouging,' hitting of elbows, and whispering disputes, were hastily adjusted, leaving a silence which might be felt, 'not a mouse stirring.' He, Todd, dressed after the plainest manner of Friends, but of the richest material, with looped cocked hat, was at all times remarkably clean and nice in his person, a man of about sixty years, square built, and well sustained by bone and muscle.

After an hour, maybe, of quiet time, everything going smoothly on—no sound, from the master's voice, while hearing the one standing near him, a dead calm, when suddenly a brisk slap on the ear or face, for something or for nothing, gave 'dreadful note' that an erruption of the lava was now about to take place. Next thing to be seen was 'strap in full play over the head and shoulders of Pilgarlic.' The passion of the master, 'growing by which it fed on,' and wanting elbow room, the chair would be quickly thrust on one side, when, with sudden gripe, he was to be seen dragging his struggling suppliant to the flogging ground, in the centre of the room; having placed his left foot upon the end of a bench, he then, with a patent jerk, peculiar to himself, would have the boy completely horsed across his knee, with his left elbow on the back of his neck, to keep him securely on. In the hurry of the moment he would bring his long pen with him, griped between his strong teeth, (visible the while,) causing both ends to descend to a parallel with his chin, and adding much to the terror of the scene. His face would assume a deep claret color—his little bob of hair would disengage itself, and stand out, each 'particular hair' as it were, 'up in arms and eager for the fray.' Having his victim thus completely at command, and all useless drapery drawn up to a bunch above the waistband, and the rotundity and the nankeen in the closest affinity possible for them to be, then once more to the 'staring crew' would be exhibited the dexterity of master and strap. By long practice he had arrived at such perfection in the exercise, that, moving in quick time, the fifteen inches of bridle rein (*allas* strap) would be seen after every cut, elevated to a perpendicular above his head; from whence it descended like a flail on the stretched nankeen, leaving 'on the place beneath' a fiery red streak, at every slash. It was customary with him to address the sufferer at intervals, as follows; 'Does it hurt?' 'Oh! yes, master; oh! don't master.' 'Then I'll make it hurt thee more. I'll make thy flesh creep—thou shan't want a warming pan to-night. Intolerable being! Nothing in nature is able to prevail upon thee but my strap.' He had one boy named George Fudge, who usually wore leather breeches, with which he put strap and its master at defiance. He would never acknowledge pain—he would not 'sing out.' Todd seized him one day, and having gone through the evolutions of strapping, (as useless, in effect, as if he had been thrashing a flour bag,) almost breathless with rage, he once more appealed to the feelings of the 'reprobate,' by saying; 'Does it not hurt?' The astonishment of the school and the master was completed, on hearing him sing out, 'No! Hurray for leather crackers!' He was thrown off immediately, sprawling on the floor, with the benediction as follows; 'Intolerable being! Get out of my school. Nothing in nature is able to prevail upon thee—not even my strap!'

'Twas not 'his love in learning was in fault,' so much as the old British system of introducing learning and discipline into the brains of boys and soldiers

by dint of punishment. The system of flogging on all occasions in schools, for something or for nothing, being protected by law, gives free play to the passions of the master, which he, for one, exercised with great severity. The writer has, at this moment, in his memory, a schoolmaster *then* of this city, who, a few years ago, went deliberately out of his school to purchase a cow-skin, with which, on his return, he extinguished his bitter revenge on a boy who had offended him. The age of chivalry preferred ignorance in its sons,to having them subjected to the fear of a pedagogue—believing that a boy who had quailed under the eye of the schoolmaster, would never face the enemy with boldness on the field of battle; which it must be allowed is 'a swing of the pendulum' too far the other way. A good writer says: 'We do not *harden* the wax to receive the impression—wherefore, the teacher seems himself most in need of *correction*—for he, unfit to teach, is making them unfit to be taught!'

I have been told by an aged gentleman, that in the days of his boyhood, sixty-five years ago, when boys and girls were together, it was a common practice to make the boys strip off their jackets, and loose their trowser's band preparatory to hoisting them upon a boy's back so as to get his whipping, with only the linen between the flesh and the strap. The girls too—we pity them—were obliged to take off their stays to receive their floggings with equal sensibility. He named one distinguished lady, *since*, who was so treated among others, in his school. All the teachers then were from England and Ireland, and brought with them the rigorous principles which had before been whipped into themselves at home."

PUBLIC SCHOOLS IN BOSTON, MASS.

The following "Memorandum of an eminent clergyman, who was educated in the best schools of Boston just before the Revolution," we copy from a volume of the "Massachusetts Common School Journal," vol. xii., pp. 311, 312. The notes are by the editor of the Journal, Wm. B. Fowle:

"At the age of six and a half years, I was sent to Master John Lovell's Latin school. The only requirment was reading well: but, though fully qualified, I was sent away to Master Griffith, a private teacher, to learn to read, write and spell. I learned the English Grammar in Dilworth's Spelling Book by heart. Griffith traced letters with a pencil, and the pupils inked them.

Entered Lovell's school at seven years. Lovell was a tyrant, and his system one of terror. Trouncing * was common in the school. Dr. Cooper was one of his early scholars, and he told Dr. Jackson, the minister of Brookline, that he had dreams of schools till he died. The boys were so afraid they could not

* Trouncing was performed by stripping the boy, mounting him on another's back, and whipping him with birch rods, before the whole school. James Lovell the grandson of John, once related to us the following anecdote, which shows the *utility* of corporeal punishment! It seems that a boy had played truant, and Master John had publicly declared that the offender should be trounced. When such a sentence was pronounced, it was understood that the other boys might seize the criminal, and take him to school by force. The culprit was soon seized by one party, and hurried to the master, who inflicted the punishment without delay. On his way home, the culprit met another party, who cried out, 'Ah, John Brown,' or whatever his name was, 'you'll get it when you go to school!' 'No, I shan't,' said the victorious boy, who felt that he had got the start of them, 'No, I shan't, for *I've got it*,' and, as he said this, he slapped his hand upon the part that had paid the penalty, thus, as the poet says, 'suiting the action to the word.'"

study. Sam. Bradford, afterward sheriff, pronounced the *P* in *Ptolemy*, and the younger Lovell rapped him over the head with a heavy ferule.*

We studied Latin from 8 o'clock till 12, and from 1 till dark. After one or two years, I went to the town school, to Master Holbrook, at the corner of West street, to learn to write; and to Master Proctor, on Pemberton's Hill, in the south-east part of Scollay's Building. My second, third, and fourth year, I wrote there, and did nothing else. The English boys alone were taught to make pens. Griffith was gentle, but his being a private teacher accounts for it.

The course of study was grammar; Esop, with a translation; Clark's introduction to writing Latin; Eutropius, with a translation; Corderius; Ovid's Metamorphoses; Virgil's Georgics; Æneid; Cæsar; Cicero. In the sixth year I began Greek, and for the first time attempted English composition, by translating Cæsar's Commentaries. The master allowed us to read poetical translations, such as Trappe's and Dryden's Virgil. I was half way through Virgil when I began Greek with Ward's Greek Grammar.

After Cheever's Latin Accidence, we took Ward's Lily's Latin Grammar. After the Greek Grammar, we read the Greek Testament, and were allowed to use Beza's Latin translation. Then came Homer's Iliad, five or six books, using Clarke's translation with notes, and this was all my Greek education at school. Then we took Horace, and composed Latin verses, using the Gradus ad Parnassum. Daniel Jones was the first Latin scholar in 1771 or 1772, and he was brother to Thomas Kilby Jones, who was no scholar, though a distinguished merchant afterward.

I entered college at the age of fourteen years and three months, and was equal in Latin and Greek to the best in the senior class. Xenophon and Sallust were the only books used in college that I had not studied. I went to the private school from 11 to 12 A. M., and to the public from 3 to 5 P. M.

The last two years of my school life, nobody taught English Grammar or Geography, but Col. Joseph Ward, (son of Deacon Joseph Ward, of Newton, West Parish, blacksmith,) who was self-taught, and set up a school in Boston. He became aid to General Ward when the war commenced, and did not teach after the war.

I never saw a map, except in Cæsar's Commentaries, and did not know what that meant. Our class studied Lowth's English Grammar at college. At Master Proctor's school, reading and writing were taught in the same room, to girls and boys, from 7 to 14 years of age, and the Bible was the only reading book. Dilworth's Spelling Book was used, and the New England Primer. The master set sums in our MSS. but did not go farther than the Rule of Three.

Master Griffith was a thin man, and wore a wig, as did Masters Lovell and Proctor, but they wore a cap when not in full dress. James Lovell was so beaten by his grandfather John, that James the father rose and said, 'Sir, you have flogged that boy enough.' The boy went off determined to leave school, and

* "We saw this done by another Boston teacher, about thirty years ago, and when we remonstrated with him upon the danger of inflicting such a blow, upon such a spot, 'O, the caitiffs,' said he, 'it is good for them!' About the same time, another teacher who used to strike his pupils upon the hand so that the marks and bruises were visible, was waited upon by a committee of mothers, who lived near the school, and had been annoyed by the outcries of the sufferers. The teacher promised not to strike the boys any more on the *hand*, and the women went away satisfied. But, instead of inflicting blows upon the hand, he inflicted them upon the soles of the feet, and made the punishment more severe."

go to Master Proctor's; but he met one of Master Proctor's boys, who asked whither he was going, and when informed, warned him not to go, for he would fare worse."

Hon. Edward Everett, in an address at the Annual School Festival in Faneuil Hall in 1852, gives the following account of the educational advantages he enjoyed in early life:—

"It was fifty-two years last April since I began, at the age of nine years, to attend the reading and writing schools in North Bennett street. The reading school was under Master Little, (for 'Young America' had not yet repudiated that title,) and the writing school was kept by Master Tileston. Master Little, in spite of his name, was a giant in stature—six feet four, at least—and somewhat wedded to the past. He struggled earnestly against the change then taking place in the pronunciation of *u*, and insisted on saying *monooment* and *natur*. But I acquired, under his tuition, what was thought in those days a very tolerable knowledge of Lindley Murray's abridgment of English grammar, and at the end of the year could parse almost any sentence in the 'American Preceptor.' Master Tileston was a writing master of the old school. He set the copies himself, and taught that beautiful old Boston handwriting, which, if I do not mistake, has, in the march of innovation, (which is not always the same thing as improvement,) been changed for the better. Master Tileston was advanced in years, and had found a qualification for his calling as a writing master, in what might have seemed at first to threaten to be an obstruction. The fingers of his right hand had been contracted and stiffened in early life, by a burn, but were fixed in just the position to hold a pen and a penknife—and nothing else. As they were considerably indurated, they served as a convenient instrument of discipline. A copy badly written, or a blotted page, was sometimes visited with an infliction which would have done no discredit to the beak of a bald eagle. His long, deep desk was a perfect curiosity-shop of confiscated balls, tops, penknives, marbles and Jews-harps—the accumulation of forty-years. I desire, however, to speak of him with gratitude, for he put me on the track of an acquisition which has been extremely useful to me in after life—that of a plain, legible hand. I remained at these schools about sixteen months, and had the good fortune in 1804 to receive the Franklin medal in the English department. After an interval of about a year, during which I attended a private school kept by Mr. Ezekiel Webster, of New Hampshire, and on an occasion of his absence, by his ever memorable brother, Daniel Webster, at that time a student of law in Boston, I went to the Latin school, then slowly emerging from a state of extreme depression. It was kept in School street, where the Horticultural Hall now stands. The standard of scholastic attainment was certainly not higher than that of material comfort in those days. We read pretty much the same books—or of the same class—in Latin or Greek, as are read now, but in a very cursory and superficial manner. There was no attention paid to the philosophy of the languages—to the deduction of words from their radical elements—to the niceties of construction—still less to prosody. I never made a hexameter or pentameter verse, till, years afterward, I had a son at school in London, who occasionally required a little aid in that way. The subsidiary and illustrative branches were wholly unknown in the Latin school in 1805. Such a thing as a school library, a book of reference, a critical edition of a classic, a

map, a blackboard, an engraving of an ancient building, or a copy of ancient art, such as now adorn the walls of our schools, was as little known as the electric telegraph. If our children, who possess all these appliances and aids to learning, do not greatly excel their parents, they will be much to blame."

AN OLD FIELD SCHOOL, OR ACADEMY, IN VIRGINIA.

The experience of one of that class of teachers, who found temporary occupation in teaching the children of one or more families of planters in Virginia, and other southern states, will be found in the "*Travels of Four Years and a Half in the United States*, (in 1798, 1799, 1800, 1801 and 1802,) by John Davis." Mr. Davis was an Englishman of more than ordinary education and social address, and while in this country numbered among his friends such men as Aaron Burr, President Jefferson, and other men of high political standing. He was a private tutor in N. York, S. Carolina, and Virginia, and his graphic sketches of men and manners show some of the deficiencies in the means of education which even wealthy planters in the southern states experienced. With letters of introduction from President Jefferson he proceeds to the plantation of a Mr. Ball, and is engaged to teach his and his neighbor's children:

"The following day every farmer came from the neighborhood to the house, who had any children to send to my Academy, for such they did me the honor to term the log-hut in which I was to teach. Each man brought his son, or his daughter, and rejoiced that the day was arriving when their little ones could light their tapers at the torch of knowledge! I was confounded at the encomiums they heaped upon a man whom they had never seen before, and was at a loss what construction to put upon their speech. No price was too great for the services I was to render their children; and they all expressed an eagerness to exchange perishable coin for lasting knowledge. If I would continue with them seven years! only seven years! they would erect for me a brick seminary on a hill not far off; but for the present I was to occupy a log-house, which, however homely, would soon vie with the sublime college of William and Mary, and consign to oblivion the renowned academy in the vicinity of Fauquier Court-House. I thought Englishmen sanguine; but these Virginians were infatuated.

I now opened what some called an academy,* and others an Old Field School; and, however it may be thought that content was never felt within the walls of a seminary, I, for my part, experienced an exemption from care, and was not

* It is worth the while to describe the academy I occupied on Mr. Ball's plantation. It had one room and a half. It stood on blocks about two feet and a half above the ground, where there was free access to the hogs, the dogs, and the poultry. It had no ceiling, nor was the roof lathed or plastered, but covered with shingles. Hence, when it rained, like the nephew of old Elwes, I moved my bed (for I slept in the academy), to the most comfortable corner. It had one window, but no glass, nor shutter. In the night, to remedy this, the mulatto wench who waited on me, contrived very ingeniously to place a square board against the window with one hand, and fix the rail of a broken down fence against it with the other. In the morning when I returned from breakfasting in the 'great big house,' (my scholars being collected,) I gave the rail a forcible kick with my foot, and down tumbled the board with an awful roar. 'Is not my window,' said I to Virginia, 'of a very curious construction?' Indeed, indeed, sir,' replied my fair disciple, 'I think it is a mighty noisy one.'

such a fool as to measure the happiness of my condition by what others thought of it.

It was pleasurable to behold my pupils enter the school over which I presided; for they were not composed only of truant boys, but some of the fairest damsels in the country. Two sisters generally rode on one horse to the school-door, and I was not so great a pedagogue as to refuse them my assistance to dismount from their steeds. A running-footman of the negro tribe, who followed with their food in a basket, took care of the beast; and after being saluted by the young ladies with the courtesies of the morning, I proceeded to instruct them, with gentle exhortations to diligence of study.

Common books were only designed for common minds. The unconnected lessons of Scott, the tasteless selections of Bingham, the florid harangues of Noah Webster, and the somniferous compilations of Alexander, were either thrown aside, or suffered to gather dust on the shelf; while the charming essays of Goldsmith, and his not less delectable Novel, together with the impressive work of Defoe, and the mild productions of Addison, conspired to enchant the fancy, and kindle a love of reading. The thoughts of these writers became engrafted on the minds, and the combinations of their diction on the language of the pupils.

Of the boys I can not speak in very encomiastis terms; but they were perhaps like all other school-boys, that is, more disposed to play truant than enlighten their minds. The most important knowledge to an American, after that of himself, is the geography of his country. I, therefore, put into the hands of my boys a proper book, and initiated them by an attentive reading of the discoveries of the Genoese; I was even so minute as to impress on their minds the man who first descried land on board the ship of Columbus. That man was Roderic Triana, and on my exercising the memory of a boy by asking him the name, he very gravely made answer, Roderic Random.

Among my male students was a New Jersey gentleman of thirty, whose object was to be initiated in the language of Cicero and Virgil. He had before studied the Latin grammar at an academy school (I use his own words), in his native state; but the academy school being burnt down, his grammar, alas! was lost in the conflagration, and he had neglected the pursuit of literature since the destruction of his book. When I asked him if he did not think it was some Goth who had set fire to his academy school, he made answer, 'So, it is like enough.'

Mr. Dye did not study Latin to refine his taste, direct his judgment, or enlarge his imagination; but merely that he might be enabled to teach it when he opened school, was his serious design. He had been bred a carpenter, but he panted for the honors of literature.

Mr. Davis accounts for his fidelity in teaching more hours than he was required to do by his contract, by his interest in the lessons of one of his female pupils;

Hence I frequently protracted the studies of the children till one, or half past one o'clock; a practice that did not fail to call forth the exclamations both of the white and black people. Upon my word, Mr. Ball would say, this gentleman is diligent; and Aunt Patty the negro cook would remark, 'He good cool-mossa that; he not like old Hodgkinson and old Harris, who let the boys out before twelve. He deserve good wages!'

Having sent the young ladies to the family mansion, I told the boys to break

up, and they who had even breathed with circumspection, now gave loose to the most riotous merriment, and betook themselves to the woods, followed by all the dogs on the plantation.

There was a carpenter on the plantation, whom Mr. Ball had hired by the year. He had tools of all kinds, and the recreation of Mr. Dye, after the labor of study, was to get under the shade of an oak, and make tables, or benches, or stools for the academy. So true is the assertion of Horace, that the cask will always retain the flavor of the liquor with which it is first impregnated.

'Well, Mr. Dye, what are you doing?'

'I am making a table for the academy school.'

'What wood is that?'

'It is white oak, sir.'

'What, then you are skilled in trees, you can tell oak from hickory, and ash from fir?'

'Like enough, sir. (A broad grin.) I ought to know those things; I served my time to it.'

'*Carpenter.*—I find, sir, Mr. Dye has done with his old trade; he is above employing his hands; he wants work for the brain. Well! larning is a fine thing; there's nothing like larning. I have a son only five years old, that, with proper larning, I should not despair of seeing a member of Congress. He is a boy of genus; he could play on the Jews-harp from only seeing Sambo tune it once.'

'*Mr. Dye.*—I guess that's Billy; he is a right clever child.'

'*Carpenter.*—How long, sir, will it take you to learn Mr. Dye Latin?'

'*Schoolmaster.*—How long, sir, would it take me to ride from Mr. Ball's plantation to the plantation of Mr. Wormley Carter?'

'*Carpenter.*—Why that, sir, would depend upon your horse.'

'*Schoolmaster.*—Well, then, sir, you solve your own interrogation. But here comes Dick. What has he got in his hand?'

'*Mr. Dye.*—A mole like enough. Who are you bringing that to, Dick?'

'*Dick.*—Not to you. You never gave me the taste of a dram since I first know'd you. Worse luck to me; you New Jersey men are close shavers; I believe you would skin a louse. This is a mole. I have brought it for the gentleman who came from beyond the sea. He never refuses Dick a dram; I would walk through the wilderness of Kentucky to serve him. Lord! how quiet he keeps his school. It is not now as it was; the boys don't go clack, clack, like 'Squire Pendleton's mill upon Catharpin Run!'

'*Schoolmaster.*—You have brought that mole, Dick, for me.'

'*Dick.*—Yes, master, but first let me tell you the history of it. This mole was once a man; see, master, (Dick exhibits the mole,) it has got hands and feet just like you and me. It was once a man, but so proud, so lofty, so puffed up, that God, to punish his insolence, condemned him to crawl under the earth.'

'*Schoolmaster.*—A good fable, and not unhappily moralized. Did you ever hear or read of this before, Mr. Dye?'

'*Mr. Dye.*—Nay, (a broad grin,) I am right certain it does not belong to Æsop, I am certain sure Dick did not find it there.'

'*Dick.*—Find it where? I would not wrong a man of the value of a grain of corn. I came across the mole as I was hoeing the potato-patch. Master, shall I take it to the school-house? If you are fond of birds, I know now for a mocking-bird's nest; I am only afeard those young rogues, the school-boys,

will find out the tree. They play the mischief with every thing, they be full of devilment. I saw Jack Lockhart throw a stone at the old bird, as she was returning to feed her young; and if I had not coaxed him away to look at my young puppies, he would have found out the nest.'

I had been three months invested in the first executive office of pedagogue, when a cunning old fox of a New Jersey planter (a Mr. Lee), discovered that his eldest boy wrote a better hand than I. Fame is swift-footed; *vires acquirit eundo;* the discovery spread far and wide, and whithersoever I went, I was an object for the hand of scorn to point his slow unmoving finger at, as a schoolmaster that could not write. Virginia gave me for the persecutions I underwent, a world of sighs, her swelling heavens rose and fell with indignation at old Lee and his abettors. But the boys caught spirit from the discovery. I could perceive a mutiny breaking out among them; and had I not in time broke down a few branches from an apple tree before my door, it is probable they would have displayed their gratitude for my instructions by throwing me out of the school window. But by arguing with one over the shoulders, and another over the back, I maintained with dignity the first executive office of pedagogue.

I revenged myself amply on old Lee. It was the custom of his son, (a lengthy fellow of about twenty,) to come to the academy with a couple of huge mastiffs at his heels. Attached to their master (*par nobile fratrum,*) they entered without ceremony Pohoke Academy, bringing with them myriads of flees, wood-lice, and ticks. Nay, they would often annoy Virginia, by throwing themselves at her feet, and inflaming the choler of a little lap-dog, which I had bought because of its diminutive size, and which Virginia delighted to nurse for me. I could perceive the eye of Virginia rebuke me for suffering the dogs to annoy her; and there lay more peril in her eye than in the jaws of all the mastiffs in Prince William County.

'Mr. Lee,' said I, 'this is the third time I have told you not to convert the academy into a kennel, and bring your dogs to school.' Lee was mending his pen 'judgmatically.' He made no reply, but smiled.

I knew old Dick the negro, had a bitch, and that his bitch was proud. I walked down to Dick's log-house. Dick was beating flax.

'Dick,' said I, 'old Farmer Lee has done me much evil—(I don't like the old man myself, master, said Dick)—and his son, repugnant to my express commands, has brought his father's two plantation dogs to the academy. Revenge is sweet—'

'Right, master,' said Dick. 'I never felt so happy as when I bit off Cuffey's great toe and swallowed it—

'Do you, Dick,' said I, 'walk past the school-house with your bitch. Lee's dogs will go out after her. Go round with them to your log-house; and when you have once secured them, hang both of them up by the neck.'

'Leave it to me, master,' said Dick. 'I'll fix the business for you in a few minutes. I have a few fadoms of rope in my house—that will do it.'

I returned to the academy. The dogs were stretched at their ease on the floor. 'Oh! I am glad you are come,' exclaimed Virginia; 'those great big dogs have quite scared me.'

In a few minutes Dick passed the door with his slut. Quick from the floor rose Mr. Lee's two dogs, and followed the female. The rest may be supplied by the imagination of the reader. Dick hung up both the dogs to the branch

of a pine-tree; old Lee lost the guards to his plantation; the negroes broke open his barn, pilfered his sacks of Indian corn, rode his horses in the night— and thus was I revenged on Alexander the coppersmith.

Three months had now elapsed, and I was commanded officially to resign my sovereign authority to Mr. Dye, who, was in every respect better qualified to discharge its sacred functions. He understood tare and tret, wrote a copper-plate hand, and, balancing himself upon one leg, could flourish angels and cork-screws. I, therefore, gave up the 'academy school' to Mr. Dye, to the joy of the boys, but the sorrow of Virginia."

SCHOOLS IN DELAWARE.

Robert Coram, in a pamphlet devoted in part to a "Plan for the General Establishment of Schools throughout the United States," printed in Wilmington, Delaware, in 1791, characterizes the state of education as follows:

"The country schools, through most of the United States, whether we consider the buildings, the teachers, or the regulations, are in every respect completely despicable, wretched, and contemptible. The buildings are in general sorry hovels, neither wind-tight nor water-tight; a few stools serving in the double capacity of bench and desk, and the old leaves of copy books making a miserable substitute for glass windows. The teachers are generally foreigners, shamefully deficient in every qualification necessary to convey instruction to youth, and not seldom addicted to gross vices. Absolute in his own opinion, and proud of introducing what he calls his European method, one calls the first letter of the alphabet, *aw*. The school is modified upon this plan, and the children who are advanced, are beat and cuffed to forget the former mode they have been taught, which irritates their minds and retards their progress. The quarter being finished, the children lie idle until another master offers, few remaining in one place more than a quarter. When the next schoolmaster is introduced, he calls the first letter *a*, as in mat; the school undergoes another reform, and is equally vexed and retarded. At his removal a third is introduced, who calls the first letter *hay*. All these blockheads are equally absolute in their own notions, and will by no means suffer the children to pronounce the letter as they were first taught; but every three months the school goes through a reform— error succeeds error, and dunce the second reigns like dunce the first. I will venture to pronounce, that however, seaport towns, from local circumstances, may have good schools, the country schools will remain in their present state of despicable wretchedness, unless incorporated with government."

VIII. NORMAL SCHOOLS AND TEACHERS' SEMINARIES.

HISTORICAL DEVELOPMENT.

I. EUROPEAN INSTITUTIONS.

By a Normal School, or Teachers' Seminary, is meant an institution for the training of young men and young women who aim to be teachers, to a thorough and practical knowledge of the duties of the school-room, and to the best modes of reaching the heart and intellect, and of developing and building up the whole character of a child. It aims to do for the young and inexperienced teacher, all that the direction and example of the master-workman, and all that the experience of the workshop do for the young mechanic—all that the naval and military schools do for those who lead in any capacity in the army or navy—all that the law school, or the medical school, or the theological seminary do for the professions of law, medicine, or theology. In every department of mechanical, artistic, or professional labor, the highest skill is attained only after long and appropriate training under wise superintendence; and the Normal School aims to impart this previous training by providing a thorough course of instruction, under competent teachers, with reference to teaching the same things to others. This course of instruction involves the whole art of teaching—a knowledge of human nature, and of a child's nature in particular—of the human mind, and especially of a child's mind, and of the order in which its several faculties should be called into exercise; of the best motives by which good habits of study can be cultivated in the young; of the arrangement and classification of scholars, and of the best means and appliances for securing obedience and order, and keeping alive an interest in the daily exercises of the school. And this art of teaching must be illustrated and exemplified by those who are to apply it, in a model school. The idea of such a school is not a mere speculation of ardent benevolence—it is an existing reality in this country as well as in Europe.

The first school specially destined for educating and training teachers in the principles and practice of their profession, was instituted by the Abbé de La Salle, while Canon of the Cathedral at Rheims, in 1681, and was perfected into the Institute of the Brothers of the Christian Schools, in 1684.

In 1697, Augustus Herman Franké founded, in connection with his orphan school at Halle, a teacher's class composed of poor students, who assisted him certain hours in the day in his schools, in return for their board and instruction. Out of these, he selected, about the year 1704, twelve, who exhibited the right basis of piety, knowledge, and aptness to teach, and constituted them his "Seminarium Præceptorum" or Teachers Seminary. These pupils received separate instruction for two years, and acquired a due

degree of practical skill, in the classes of the same general establishment. Teachers thus trained, and hundreds of others, who resorted to Halle, to profit by the organization and spirit of the schools of Franké, disseminated a knowledge of better methods of school organization and instruction throughout Europe, in the course of the next half century.

In 1735, the first regular seminary for teachers in Prussia was established in Pomerania, and the second at Berlin, in 1748, by Hecker, a pupil of Franke. By a royal ordinance in 1752, Frederic 2d enjoined that all vacancies in the country schools on the crown lands, in certain sections of his kingdom, should be supplied by pupils from Hecker's Seminary. The King at the same time allowed an annual stipend for the support of twelve alumni of this establishment, a number which in 1788 was raised to sixty. In 1773, the chools established at Rekahn, in Brandenburg, became the model schools to which young men resorted from every part of Germany to be trained in the principles and practice of primary instruction. Prior to 1800, there were but six of these institutions in Prussia. But it is the pride and glory of this monarchy, that in periods of the greatest national distress and disaster, when the armies of France were desolating her fields, occupying her citadels, and diverting her revenues, the great work of improving her schools was never lost sight of. The establishment of teachers' seminaries still went forward; that at Konigsburg in 1809, at Branersburg in 1810, and at Breslau in 1812. But not content with establishing these seminaries at home, the most promising young teachers were sent into other countries to acquire a knowledge of all improvements in the science and art of education.

Normal Schools were introduced into Hanover in 1757; into Austria in 1767; into Switzerland in 1805; into France in 1808; into Holland in 1816; into Belgium in 1843, and into England in 1842.

In Prussia and most of the German States, there are now enough of these institutions to supply the demand for teachers in the public schools. Saxony, with a population less than that of the State of New York, supports five Normal Schools, and Saxe-Weimar, with a population less than that of Connecticut, supports two. Prussia, with a population of fourteen millions, has at this time forty-nine seminaries, in which there are nearly three thousand teachers. At the end of three years after leaving the seminary, the young teachers return for a re-examination.

In Great Britain, after years of strenuous effort on the part of the friends of popular education, the importance of Normal Schools as the chief means for improving the qualifications of teachers, has been recognized by the Government. The Training School at Chelsea, (called St. Mark's College,) under the management of the National Society, the Normal and Model School of the British and Foreign School Society, the Battersea Training School, and the Model School of the Infant School Society in England, the Model School of the National Board for Ireland, the Normal Schools at Edinburgh and Glasgow in Scotland, are all aided out of the annual parliamentary grant for education.

There has been expended by the Government and Educational Associations, chiefly of a denominational character, in buildings and material outfit for the 38 Normal or Training Schools now in operation in England, Scotland and Ireland, upward of $1,000,000. The annual cost of these institutions to the Government in 1860, was over $200,000.

In the plan for the reorganization of the entire system of public instruction in Russia, now (1863,) under the consideration of the Emperor, provision is made for the establishment of a Central Normal School, and Provincial Teachers Institutes numerous enough to give a professional training to all who are employed to teach the elementary and secondary schools.

The following table exhibits a general view of the number of State Normal Schools in Europe.

TABLE.

NUMBER OF NORMAL SCHOOLS IN THE DIFFERENT STATES OF EUROPE.

Prussia,	51	1735
Saxony,	10	1785
Austria,	11	1775
Bavaria,	9	1777
Wirtemberg,	7	1757
Hanover,	7	1750
Baden,	4	1768
Hesse-Cassel,	3	
Hesse-Darmstadt,	2	
Anhalt,	3	
Saxe-Coburg-Gotha,	2	1779
Saxe-Meininger,	1	
Saxe Weimar,	2	
Oldenburg,	2	
Holstein,	1	1788
Nassau,	1	
Brunswick,	1	
Luxemburg,	1	
Lippe,	1	
Mecklenburg Schwerin,	1	
Mecklenburg Strelitz,	1	
Lubec,	1	
Bremen,	1	
Hamburg,	1	
Frankfort,	1	
Holland,	2	1816
Belgium,	2	
Denmark,	2	
Sweden,	1	
France,	97	1808
England and Wales,	23	1840
Scotland,	2	1835
Ireland,	1	1836
	264	

The earliest suggestion of institutional provision for the specific preparation of teachers in the United States, which we have met with, appeared in the *Massachusetts Magazine* for June, 1789, in an article by Elisha Ticknor advocating the establishment of County Schools, in order to fit young gentlemen for college and *school keeping*.

In 1816, Denison Olmsted, in his Masters' Oration in the commencement exercises of Yale College (where he was afterward Professor,) proposed the establishment by the state of Connecticut, of an Academy to *train school masters* for the State Common Schools.

In 1823, Rev. Samuel Read Hall opened a select school at Concord, Vermont, in which he advertised to give a course of instruction adapted to teachers.

In the winter of 1825, there appeared, almost simultaneously,* but without any knowledge of each other's views, and even without any personal knowledge of each other, in the Connecticut Observer, printed in Hartford, over the signature of a "Father," and in the Patriot, printed in Boston, over the signature of "Franklin," a series of articles in which the claims of Education as a science, and Teaching as an art, were ably discussed, and an Institution was proposed in each series, having the same general features, for the special training of teachers for their profession. These articles were collected and published by their respective authors, in pamphlet form, the first with the title of "*Plan of a Seminary for the Education of Instructors of Youth, by Rev. Thomas H. Gallaudet.* Boston, 1825,"—and the last, with the title "*Essays on Popular Education, containing a particular examination of the Schools of Massachusetts, and an Outline of an Institution for the Education of Teachers, by James G. Carter.* Boston, 1826."

In the same year, 1825, Walter R. Johnson, then residing in Germantown, Penn., without any knowledge of the views of Mr. Carter or Mr. Gallaudet, in a pamphlet, entitled "*Observations on the Improvement of Seminaries of Learning*," set forth the necessity and advantages of schools for the special training of teachers.

In the same year, in which appeared the earliest publication on the subject in Connecticut, Governor Clinton commended to the consideration of the Legislature of New York, "the education of competent teachers;" and in 1826, "the establishment of a seminary" for this purpose. From this time, the importance of the professional education of teachers, and of institutions specially devoted to this object, began to attract the attention of statesmen and educators, until, at the close of a quarter of a century, the idea is practically realized in each of the four states in which the enterprise was first proposed. The history of the efforts made by the friends of educational improvement to establish Normal Schools in these states is full of instruction and encouragement to those who are laboring in the same field, and for the same object, in other states.

* The article by Mr. Gallaudet, containing the statement of his plan of a Seminary, was published on the 4th of January, 1825, and those of Mr. Carter, devoted to his Outline of an Institution, appeared the 10th and 15th of February, 1825.

The Normal Schools already established in this country are, it is believed, doing much good, and realizing the promises of those who have been active in getting them up; but as compared with European Institutions of the same kind, and the demands for professional training in all our schools, they labor under many disadvantages.

1. Pupils are admitted without adequate preparatory attainments, and without sufficient test of their "aptness to teach."

2. A majority of the pupils do not remain a sufficient length of time, to acquire that knowledge of subjects and methods, and especially that intellectual power and enlightenment, which are essential to the highest success in the profession.

3. There are no endowments to reduce the expense of a prolonged residence to a class of poor but promising pupils.

4. They are not provided with a sufficient number of teachers for the number of pupils admitted.

5. From the want of a well-defined and limited purpose in each institution, they are aiming to accomplish too much—more for every class of pupils,—those with, and those without previous experience,—the young, and the more advanced,—those intended for country and unclassified schools, and those intended for the highest grade of city and town schools,—than can be well done for either class of pupils.

Further experience will make these deficiencies more apparent, not to those who have the immediate charge of these institutions, for they are already painfully conscious of them, but to the people, legislatures, and liberally-disposed men, who must apply the remedies by increased appropriations to existing, and the establishment of additional schools.

The following is a list of the Normal Schools already established, with the location and date of the establishment of each school.

Massachusetts,	West Newton,	1839
	Bridgewater,	1839
	Westfield,	1839
	Salem,	1854
New York,	Albany,	1845
	Oswego,	1863
Connecticut,	New Britain,	1849
Michigan,	Ypsilanti,	1850
Rhode Island,	Bristol,	1852
New Jersey,	Trenton,	1855
Illinois,	Bloomington,	1857
Pennsylvania,	Millersville,	1859
Minnesota,	Winona,	1859
Wisconsin,	Madison,	1862
Maine,	Augusta,	1863
British Provinces,	Upper Canada, Toronto,	1846
	Lower Canada, Montreal, Protestant,	1857
	" " " Catholic,	1857
	" " Quebec,	1857
	New Brunswick, St. Johns,	1848
	Nova Scotia, Truro,	1855

AN ADDRESS*

BY

EDWARD EVERETT, GOVERNOR OF MASSACHUSETTS,

AT THE OPENING OF THE NORMAL SCHOOL AT BARRE, SEPTEMBER 5, 1839.

We are assembled to take a suitable public notice of the opening of an institution in this place, destined, as we hope, to exercise a salutary influence on the cause of common school education. The visitors of the institution have thought it expedient that a public explanation should be made, at this time, of its nature and objects, and of the hopes and expectations with which it is founded; and they have requested me, on their behalf, to appear before you for this purpose. I have complied with their request cheerfully. My official connection with the Board of Education, which, under the authority of the Legislature, has established the school, and the deep personal interest I take in the result of this experiment for the improvement of popular education in the commonwealth, (convinced as I am that the time has come when it is incumbent on the people of Massachusetts to do more than has yet been done for the improvement of their common schools,) are the motives which have led me, at considerable personal inconvenience, to undertake the duty which has been assigned to me on this occasion.

The institution which is now opened in this pleasant and prosperous village, is devoted to the education of teachers of common schools, and is called a Normal School. The name *normal* is derived from a Latin word, which signifies a rule, standard, or law. Schools of this character were called Normal Schools, on their establishment in France, either because they were designed to serve in themselves as the model or rule by which other schools should be organized and instructed, or because their object was to teach the rules and methods of instructing and governing a school. This name has been adopted to designate the schools for teachers established in Massachusetts, because it is already in use to denote similar institutions in Europe; because it applies exclusively to schools of this kind, and prevents their being confounded with any others; and because it is short, and of convenient use. It has been already adopted in England and in our sister states, in writing and speaking of institutions for the education of teachers.

Schools of this kind are of comparatively recent date. In 1748, a private school for teachers was established by the Rev. John Julius Hecker, a minister of the gospel at Berlin, and chief counselor of the consistory of that place. A document cited by M. Cousin, in his celebrated report on the subject of public instruction in Prussia, speaks of Hecker as "the first individual who undertook to train young men for the art of teaching." This little institution was founded at a very critical period in the history of Prussia, and even of Europe; in fact, it was an era of mighty movement throughout the world. Frederic II., commonly, and by a somewhat questionable title, called the Great, was projecting the plans of aggrandizement by which he aimed to raise Prussia, before his time a secondary state, to the rank of a leading power in Europe. It would have been happy for his subjects and mankind if all his measures had been as wise or as innocent as those which he adopted for the improvement of education. He seems early to have comprehended the importance of the systematic education of teachers; and in the year 1754, the private school, established under the auspices of Mr. Hecker, was raised to the rank of a royal primary school for the education of schoolmasters and parish clerks. It was directed, by a royal ordinance of that year, that all schoolmasters and parish clerks, whose places were in the gift of the crown, should be appointed from this institution. It is probable that at the same time funds were appropriated by the government for its support.

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*Copied by permission from "*Orations and Speeches on various occasions, by Edward Everett.* 2 vols. Boston: Charles C. Little and James Brown. 1850."

Scarcely, however, was this beginning made in the systematic education of teachers, when the dreadful Seven Years' war came on; a war which spread from our western wilderness, where it broke out, to the bounds of the civilized world, and the remotest European settlements in India. Frederic was the hero of this war on the continent of Europe. He conducted it with a perseverance, skill and resolution, which astonished mankind, and came out of it with an exhausted treasury, shattered health, and a wasted kingdom. The Normal School at Berlin, in common with all the other institutions of the country, languished under the pressure of the times. It remained, with the exception of a few inconsiderable establishments of the same character in the city of Berlin, the only institution for the education of teachers, and was, of course, wholly inadequate to the wants of the kingdom. In 1770, a fund of four thousand dollars annually was appropriated by Frederic for the general improvement of the Prussian schools, and it was expended in raising the salaries of teachers. A considerable impulse was given to the cause of education by this endowment; but I do not find any further notice of the progress of Normal Schools during the residue of his reign.

Shortly after his death, the French Revolution began; and in the disastrous wars and convulsions to which it gave rise, the various states of Germany, and none more so than Prussia, were trampled to the dust. The effects were felt in all their institutions; but, as often happens in human affairs, the moment of extremest depression is the moment of commencing regeneration. The Prussian monarchy, broken by the fatal battle of Jena, in 1806, seemed on the verge of dissolution, and to owe a precarious existence to the clemency of Napoleon. At this gloomy period, it occurred to some noble minds to attempt the restoration of affairs by a strong appeal to the popular mind, and by awakening a powerful sentiment of patriotism. Every thing was resorted to which could promote this end. The clergy were appealed to; the high schools and universities were agitated; a secret association, under the name of the *Union of Virtue*, (Tugendbund,) was formed throughout the country; the ancient German costume was revived; a jealousy of foreigners inculcated; and, as an important instrument toward the end in view, the attention of the government was, in 1809, again particularly turned to the subject of education of teachers. In 1810, the Normal School at Berlin was re-organized; but before the result could be seen, the great and final struggle of the northern powers of Europe with Napoleon took place. The conflict was for the independence or subjection, the life or death, of nations. The entire population rose as a man at the call of the governments; the universities and academies sent their young men, scarce able to bear the weight of a musket, to the war; and it terminated in the overthrow of the invader.

From that moment, every thing in Germany seemed animated with new life. Prussia, in particular, with the establishment of a general peace, bent all the power of the monarchy upon national education, as the great safeguard of national independence. The Normal School of Berlin was transferred to Potsdam, as a situation more retired and favorable for its objects. Similar schools were proposed throughout the kingdom, and in other parts of Germany; and in the year 1819, the subject of education was referred to a separate department of the government, under a minister of state exclusively devoted to its administration. The present organization of the Prussian system of education dates from this period, and by the provisions of an ordinance of the government of the same year, a royal Normal School is established in each of the ten provinces of the kingdom, as an essential part of the system. From these seminaries, with the aid derived from various local establishments of the same character, teachers thoroughly trained in the art of instruction are furnished for all the public schools of Prussia. The same process has been going on contemporaneously in Saxony, in Bavaria, in Wirtemberg, in Baden, and other German states. The example early spread to France, and more recently to Holland. One or two institutions of a private character have, it is believed, been established in England for the formation of teachers; and it has been proposed at the present session of parliament, by a committee of the privy council of the realm, to found a central Normal School in the city of London.*

* Since the delivery of this address, this and other similar projects have gone into highly successful operation in England, under the auspices of the committee of the privy council for education.

The attention of the friends of education in several of the states of the Union has for some time been turned to this subject. In New York, some provision has been made by the Legislature for training teachers at the incorporated academies of the state. In some of our own respectable academies, the qualifying of teachers of both sexes has been particularly attended to, and these establishments, in point of fact, have served as the nurseries from which many of our schools have been furnished with instructors. In addition to what has been done in this way, an institution, amply endowed by private liberality, has existed for some time at Andover, expressly devoted to the education of instructors. Many respectable teachers have, it is believed, been formed at this school.

The subject of special provision by public authority for the education of teachers has at many different times, within the last few years, been considered by the committees of education of the two branches of the Legislature. Their establishment has been strongly urged in the reports which, from time to time, have emanated from this source. Among those who have recommended such a provision with the greatest zeal and intelligence, it would be unjust not to mention the name of a citizen of this county, (Mr. Carter, of Lancaster,) who, both in a separate publication and in official reports as a member of both branches of the Legislature, has rendered distinguished service in this way.

In the first report of the Board of Education, at the beginning of the year 1838, the attention of the Legislature was invited to this subject. In the course of the ensuing session, the secretary of the board was authorized by a friend of education, whose name was not communicated to the public,* to inform the Legislature that ten thousand dollars would be furnished by him whenever the same sum should be appropriated from the public treasury, to be expended under the direction of the Board of Education in qualifying teachers for the common schools of Massachusetts. This offer was promptly accepted by the Legislature, and the requisite appropriation made.

The steps taken by the Board of Education, in discharge of the important trust thus devolved upon them, are minutely set forth in their second annual report, which was made to the Legislature at the commencement of the last session. It will be sufficient to observe, on the present occasion, that after deliberate and anxious reflection, and a careful comparison of the claims of various places proposed, in different parts of the commonwealth, Lexington, in Middlesex county, and Barre, in Worcester county, have been selected as the sites of two of the Normal Schools. A confident expectation is entertained that a third may shortly be established in some other part of the state.†

These institutions are, of course, to some extent experimental. They are so of necessity. The funds provided for their support, with all the subsidiary aid which can reasonably be expected from the friends of education in the neighborhood of the schools, although highly creditable to the generous spirit by which they are furnished, are quite inadequate to the endowment of permanent establishments. For reasons set forth in the report to which I have alluded, it was thought proper not to stake the result of the whole trial on one school; but to afford to different parts of the commonwealth an opportunity of judging for themselves. It was further considered that three years is the shortest period which would authorize any safe conclusion as to the operation of the system. It will readily be perceived that when the funds to be disposed of are divided among three schools, and distributed over three years, it becomes necessary to adopt the most frugal scale of expenditure not inconsistent with the object to be attained. Our situation in this respect is widely different from that of foreign countries, where ample funds for objects of this kind are appropriated by wealthy governments; where buildings, apparatus, libraries, and the maintenance of pupils, are provided for by permanent dotations; and as many instructors are supported as are deemed necessary for the fullest development of the system.

The narrowness of the means from which the experiment of our Normal Schools is undertaken may (though we trust it will not) defeat its success. We hope that so much good will manifestly be done within the range of our resources, that the Legislature will be disposed, and private benefactors encouraged, to convert our temporary Normal Schools into permanent foundations for the qualification of teachers. Still, however, we trust, in justice to all con-

* The late Hon. Edmund Dwight.

† Since this address was delivered, a third Normal School has been founded at Bridgewater, and those at Lexington and Barre have been transferred to Newton and Westfield.

cerned, that it will be borne in mind, that this experiment is conducted under considerable disadvantages, independent of the difficulties incident to the organization of every new institution. This consideration, we trust, will secure us the sympathy and co-operation of the community in which the schools are established, and of the public at large. It is always of great importance to a youthful institution, that it should be kindly regarded in the place where it is established. We trust that the respected principal of this school, and all who may have a joint care with him in conducting it, and all who resort to it to qualify themselves as teachers, will enjoy the good will, and be favored with the countenance and kind offices, of the reverend clergy of all denominations, of the individuals of lead and influence in the other professions, and of the citizens generally in this part of the commonwealth. While no pains will be spared to make the school creditable to the community in which it is placed, nothing will do more to promote its prosperity than the friendly regard of an enlightened public.

This occasion requires a few remarks on the character and objects of Normal Schools, and the importance of a systematic education of teachers. Much has been said and written of late on this subject. Not to mention foreign publications, it is discussed at length in the legislative reports to which I have alluded, and a very valuable essay by Professor Stowe, on Normal Schools and Teachers' Seminaries, has recently been given to the public. The necessary limits of an address of this kind will require my remarks to be of a very general character.

The office of the teacher, in forming the minds and hearts of the young, and training up those who are to take our places in life, is all-important. After all that has been said, in all ages, on the subject, more than justice has not been, and never can be, done to the theme. With no small part of the children in the community, the intercourse of the teacher with the young is scarcely inferior, in closeness and the length of time for which it is kept up, to that of the parents;—not at all inferior, in the importance of the objects to be attained by it. As soon as the child is old enough to be sent to school, the teacher is relied upon to furnish occupation for the opening faculties of the mind, to direct its efforts in the acquisition of the elements of knowledge, and to suggest the first distinct ideas on some of the most important questions in conduct and morals. The child is committed to the teacher's hands in the very morning of life, when the character, still more than the young limbs, is, so to say, still in the gristle. They have, both limbs and character, acquired some of their proper consistency and power of resistance; but to how much of the intellectual and moral frame are not the first impress and shaping to be given at school? Is this a light matter? If the teacher was to fashion your child's personal proportions, or to remold his features, with what jealousy would you inquire after his qualification for that task? Is it of less importance how he fashions and molds the features of the mind? Is it of small account, whether your child's germinating faculties—to use a proverbial expression, to which no rhetoric can add force—shall be "nipped in the bud," a bud in which seeds of immortal life and heavenly intelligence have been curiously wrapped by the Creator? The husbandman can tell us if it is a matter of little or no consequence whether you employ a skillful or an unskillful person to raise a crop of corn, the growth of a few months, under a simple process of culture. And yet so much depends on proper management, that from the same seed you may see, in one field, the corn towering up, vigorous, swelling with life and strength, its broad, healthy leaves crackling till the farmer thinks he can both hear it and see it grow, the graceful tassel dancing on the summit of the stalk, and dropping its fertilizing powder on the silken filaments, which force their way from the top of the husk to receive the vital principle, and convey it to the ripening ear; and perhaps on the other side of the way, in a corner of the sluggard's garden, struggling with rank weeds for the joint possession of the unenriched soil, you will see, from the same seed, a scanty, blighted, sickly crop, yellow as saffron when it ought to be green, and black when it ought to be yellow, and scarce promising a few meager stalks for the barn-yard. Whenever I witness such a contrast in the natural world, I ask myself, with trembling, whether the mind is a principle so much less delicate than a blade of grass,—whether the proper care and culture of the intellect, the raising up and the training up of that unspeakable mystery on earth, a thinking, reasoning, discoursing, immortal creature,—are so inferior in importance, in

difficulty, and in the amount of the consequences involved, that while we would trust the tillage of our field, the sowing of our corn, and the gathering of the harvest, only to an expert and a judicious hand, any one may be trusted to keep our schools and cultivate the minds of our children?

These inquiries scarcely need an answer. Every man's reflection who is able to reason on the subject,—every one's observation who has turned his attention to it,—every one's experience who has had children of his own confided to a succession of teachers, and still more, who, at any time, has himself been engaged in the business of instruction, will satisfy himself that the teacher's duty is important, complicated, and arduous. It is not a mere piece of job-work, to which any one may turn his hand, but a professional calling, which requires knowledge, judgment, and experience.

There is scarce such a thing conceivable, as even a solitary act, consisting of several parts or movements, which does not admit of every degree of excellence in the manner and success of the performance. See two men handle an ax, in cutting down a tree, one a raw hand, the other a practiced woodman. Look at two persons on horseback, of equal courage and strength, the one for the first time in his life in the saddle, the other an expert rider. One seems to realize the fable of the Centaur, as if he were himself a part of the animal on which he is moving; the other can scarce keep his seat. Let an inexperienced person go to work with a handsaw or a paint brush; or undertake to conduct a piece of cloth through a power-loom, or to cover a whip-handle with its mysterious network; and he will be very sure, for several times, to fail. I think there are few persons in this assembly, except those who may have had considerable practice, who can drive a nail straight into a board, without striking their fingers with the hammer. In fact, "to hit a nail on the head," simple as the operation seems, is in reality one of so much nicety, that it has become a proverbial expression for dexterity and skill.

We might cast our eyes over the entire circle of human pursuit, and find new illustrations of the necessity of diligent preparation for every calling; and no one can seriously suppose that the office of an instructor makes an exception. But inasmuch as institutions for the education of teachers are as yet hardly known by name among us, it is a natural question how teachers in our country have hitherto been able to prepare themselves for the discharge of their duties. May not the means which have hitherto proved adequate for the supply of our schools with competent instructors, still suffice for that purpose? The question is a fair one, and deserves a candid answer.

Whoever thinks that we are favored with an ample supply of teachers, as well qualified as can be wished, needs no further answer. Whoever considers that of the teachers in times past and at the present day in our schools, there are those possessing all degrees of qualification, from very high to very low, it will seem a pertinent inquiry, what their means of preparation have been; and such an inquirer will probably be of opinion that we need a more systematic and efficient preparation for this purpose.

We must assume, then, first, that natural aptitude goes very far, on the plan hitherto pursued, in deciding the qualification of the teacher. This, under all circumstances, will be an important element. One man will be a better teacher, with little or no training or experience, than some others, who pass their lives in the business. This, however, is equally the case in every pursuit or calling,—in law, physic, and divinity, in trade, manufactures, and farming,—and is never thought to supersede the necessity of education. Some remain inefficient and incapable after every imaginable advantage; others, with slender opportunities, bound, as it were, at a single leap, to the front rank. I have seen a person, who, from his infancy, never knew a want; who passed from the arms of a careful nurse into the care of the best of teachers; who enjoyed, from the first, every conceivable aid and encouragement, (except the most efficient of all, the spur of necessity,) the best of masters, the best of books in abundance, and steady schooling, and, at the close of his school education, grossly ignorant in every branch of knowledge; while another, of the same age, educated under the stern discipline of necessity, with limited means, the ordinary chance of instructors, the old books which his father wore out before him, and attendance at school far from steady, has advanced from one branch to another, mastering each as he goes, with a keen relish for learning, and an ever-craving appetite for new truth. Whatever may be the calling of these two men, one is destined

to eminence, the other to failure. Should circumstances call them to the instructor's desk, it is quite evident that he who has learned little will have still less to teach, while the other will be very likely to exhibit the same facility in the communication as in the acquisition of knowledge.

In the next place, the teacher's fitness, at the present day, depends very much on the kind of instruction which he received himself while at school. If he was so fortunate as to be taught by a sound, accurate, and judicious instructor, he will be not unlikely to exhibit that character himself. A good degree of the school-keeping capacity, and I may say, also, incapacity, are traceable to this source. Our schools are under a kind of traditionary discipline. To a considerable extent they are kept by young men and women, who make a pretty rapid transition from the pupil's bench to the master's and mistress's chair. Unless they possess strong, original minds,—which are not very common,—there is not much likelihood that they will rise above the standard of the schools where they were themselves taught. If these were very good, they will be more apt to fall below it. Mediocrity is much more apt to be propagated than excellence. If a teacher of average capacity keep the school for a few years, he will not be likely to make any improvements, and will do very well if he hands it over to his successor as good as he found it. When this state of things prevails in a community for a long course of years, we behold the painful spectacle of schools in the rear of every thing else. There is progress in every thing else, but the schools are stationary, and even degenerating. I have heard judicious observers express the doubt, whether the average of our district schools, at the present day, are better than they were thirty years ago. If the remark is just, it is a state of things not very creditable to the commonwealth. To keep pace with the general progress of improvement, they ought to be much better. We should be ashamed to be quoted hereafter, as a proof that there is a law in the intellectual and moral, like that which has been observed in the natural world, with respect to many of the products of the earth—that the fruit which is borne on the graft runs out with the original stock. Good husbandry requires that attention should be constantly given to the discovery of improved methods, and the introduction of new varieties raised from the seed. Tradition is closely allied to degeneracy.

Where the teacher engages in his pursuit for life, a new source of qualification presents itself of great value; I mean *experience*. He qualifies himself. But such teachers are not found, I presume, in many of our common schools. They rise to higher stations. Besides this, it may happen, when Experience is the teacher, as with teachers of other kinds, the pupil is by no means sure to excel his master. Self-instruction is not always improving. It depends on the character of a man's mind, how much advantage he derives from experience. The experience of one man is clear and decisive. He commits an error, perceives it, and henceforward avoids it. He is struck with the advantage of some procedure or method, traces that advantage to its principle, builds a rule upon it, and enlarges or amends his practice to the end of life. The experience of other men yields them no such fruit. It is vague and irresolute. They live and act, but have no experience, properly so called. Proceeding without steady principles of conduct, without the intelligence or the moral aptitude to profit by their mistakes, the working of one day counteracts that of another. It is only where order, the first law of earth, as well as Heaven, presides, that day unto day uttereth speech, and night unto night showeth forth knowledge. Without this guide of conduct, experience may perplex instead of directing. The mistake of to-day produces the mistake of to-morrow; and life is exhausted in half-finished experiments and constantly-repeated blunders, so that whether a man's experience profit him depends upon whether it is good experience, which may be either successful experience, or unsuccessful experience wisely heeded; and it may often happen that the recorded experience of another more judicious mind will in reality guide a man better than his own.

The recorded experience of others, then,—that is, books,—is another means by which the teacher at present qualifies himself for his calling. Unquestionably, the conscientious instructor may derive the greatest advantages from the careful study of judicious publications on the subject of his pursuit. The number of these is greatly multiplied of late years. It is a branch of literature comparatively of recent growth; and without doing injustice to the works of the patriarchs in this science, of Plato and of Cicero to the writings of Ascham,

of Milton, of Locke, I am inclined to think that, for practical views, what has been written within the last fifty years exceeds, both in amount and value, all that had before been given to the world on the subject of education. As far as my acquaintance with the subject extends, the works of Miss Edgeworth are entitled to the credit of having first promulgated, in the English language at least, sound and judicious views as to the whole business of education. A person thoroughly possessed of every thing in her works, would have but little to learn, as to general principles, (with one exception,) from other sources. There are, however, many things, of course, in her publications, not applicable to the condition of things in this country; and on one all-important topic, the subject of religious instruction, there is a deeply to be lamented deficiency. For the practical purposes of the American teacher, some good works have appeared in our own country, of which that of Mr. Jacob Abbott appears to me decidedly the best. No person can peruse it without gaining new conceptions of the importance of the teacher's duty, and practical hints as to the best method of discharging it. Whether a perusal of it will not, in most cases, leave on the reader's mind a painful impression as to the imperfection of our schools, in condition and management, is a question which each must answer for himself.

From the various useful works on the business of instruction, the faithful teacher will, under all circumstances, derive great benefit. But neither in this nor any other calling, will the solitary study of books effect all that is to be desired, to say nothing of the objection to this and all the other sources of self-instruction, which arises from the condition of the schools, while the master is endeavoring to improve himself. Those of our children may do well who have the advantage of his teaching, after he has qualified himself by experience in office and the study of good books; but what is to become of those who are to get their education while this process is going on, and before it has proceeded to any valuable extent? As a general remark, perhaps it would not be unjust to say, that most of our teachers retire from that pursuit about the time they become well qualified to carry it on to the greatest advantage.

We are thus brought to the necessity of some specific preliminary preparation for the office of teacher—a preparation which shall fit him in some degree beforehand for his duties. To afford this preparation, is the precise object of a Normal School. Nothing is farther from my purpose than to set up the pretension that there can be no well-qualified teacher without such a school; but that great advantages may be expected from a regular plan of instruction, in seminaries devoted to this object; a plan of instruction to come in aid of all the other means of improvement, on which the faithful teacher must now exclusively depend. To afford this instruction, is the object of the Normal Schools now established in the commonwealth. It is impossible that it should be so thorough and comprehensive, as the theory of a perfect institution of the kind requires. There are no funds applicable to the expense of such an establishment; and our young men and women could not generally afford the time requisite for a very long course of preparation, because the majority of our districts do not require, and would not support, teachers who, having been at great expense of time and money in fitting themselves for their calling, would need a proportionate compensation. We suppose that many of those who resort to these institutions, will, at present, be able only to pass but a part of one year in the enjoyment of their advantages; but while provision is made for the shortest period for which any individual could reasonably wish to be received, a thorough course of instruction will also be arranged for those who desire to devote a longer time to their preparation as teachers.

Such a course of instruction will obviously consist of the following parts:

1. A careful review of the branches of knowledge required to be taught in our common schools; it being, of course, the first requisite of a teacher that he should himself know well that which he is to aid others in learning. Such an acquaintance with these branches of knowledge is much less common than may be generally supposed. The remark may sound paradoxical, but I believe it will bear examination, when I say, that a teacher thoroughly versed in those branches of knowledge only which are taught in our common schools, is as difficult to find as a first-rate lawyer, divine, or physician, statesman, man of business, or farmer. A good schoolmaster should be able to read and speak the English language with propriety, ease, and grace; and this can not be done without a thorough knowledge of its grammar. He should possess, at the same

time, a clear, shapely, and rapid hand-writing, and be well versed in the elemental principles and operations of numbers. Without going beyond these three branches,—best designated by the good old-fashioned names of reading, writing, and arithmetic,—I venture to say that a man who possesses them thoroughly is as rare as one of corresponding eminence in any of the learned professions. And yet the law requires such masters for our district schools. What says the statute? "In every town containing fifty families or householders, there shall be kept, in each year, at the charge of the town, by a teacher or teachers of competent abilities and good morals, a school for the instruction of children in orthography, reading, writing, English grammar, geography, arithmetic, and good behavior."

How few, even of those considered men of education, are thoroughly versed even in the branches required by law in our common schools! How much fewer who know them as a teacher should know them! for a teacher ought to know of every thing much more than the learner can be expected to acquire. The teacher must know things in a masterly way, curiously, nicely, and in their reasons.

The great mistake in monitorial instruction is, that it supposes that the moment the bare knowledge of a fact in its naked form is attained, it qualifies a person to teach it to others. The teacher must see the truth under all its aspects, with its antecedents and consequents, or he can not present it in just that shape in which the young mind can apprehend it. He must, as he holds the diamond up to the sun, turn its facets round and round, till the pupil catches its luster. It is not an uncommon thing to hear it said of a grown person that he is too learned to teach children; that he knows too much, is too far in advance of their minds, to perceive their difficulties. I imagine the trouble generally to be of the opposite character. The man of learning either never understood the matter thoroughly, or he has forgotten what he once knew. He has retained enough of his school learning for the particular calling of life he has chosen; but he has not retained a clear recollection of the elemental truths which it is necessary the learner should comprehend. If in this state of things he can not comprehend the schoolboy's difficulty, it is not his superior wisdom, but his ignorance, which is at fault. These remarks apply particularly to the science of numbers, over which most of our children pass languishing days and weeks, vainly striving to master a hard "sum" or a hard rule, which they finally give up in despair, or of which they content themselves with some false explanation, from pure want of capacity on the part of the teacher. A child of eight or nine years of age, at one of our district schools, had run through the chief rules of arithmetic, as it used to be taught, doing all the sums, and setting them down in his ciphering book, without the slightest comprehension of the reason of any one of the operations. At last, after going for a second or third time through the rule of decimals, he, for the first time, caught a glimpse of the real nature of a decimal fraction, of which he had been wholly ignorant before, and which, in his simplicity, he thought a discovery of his own. It was not till some time afterward that he found out that mankind had for a great while been aware that a decimal is the numerator of a fraction whose denominator is a unit with as many ciphers as the numerator has places. The first object of instruction in a Normal School is, as far as possible, in the space of time assigned to its instructions, to go over the circle of branches required to be taught, and see that the future teacher is thoroughly and minutely versed in them.

2. The second part of instruction in a Normal School is the art of teaching. To know the matter to be taught, and to know it thoroughly, are of themselves, though essential, not all that is required. There is a peculiar art of teaching. The details of this branch are inexhaustible, but it is hoped that the most important principles may be brought within such a compass as to afford material benefit to those who pass even the shortest time at these institutions. The subject should be taken up at its foundation, in those principles of our nature on which education depends; the laws which control the faculties of the youthful mind in the pursuit and attainment of truth; and the moral sentiments on the part of teacher and pupil which must be brought into harmonious action. The future teacher must be instructed in the most effectual way of reaching untaught mind—a process subtile, difficult, various. The first thing requisite often will be to ascertain what has to be unlearned, both as to positive errors and bad habits of mind. The child who has been accustomed to add numbers together

by counting on his fingers, instead of learning a simple addition table by rote at the outset; who has formed to himself a small, ill-looking, and illegible scrawl, under the name of a running hand, without ever having learned to shape the letters in bold and fair proportions; or who, under the notion of refinements beyond the common standard, has been taught such barbarisms as "he shew me the book," "I have began to read it," "had I have had time to go,"—such a child, I say, comes into the hands of the teacher heavily laden with a cargo, which it must be the first labor and care to throw overboard.

But the art of teaching is not confined to a correction of the errors, or a reform of the bad habits, of the mistaught pupil. Where nothing of this kind is to be done, the mind of the learner is still to be guided, aided, and encouraged in its progress. The perfection of the art of teaching consists in hitting the precise point between that which the studious pupil must do for himself, and that which the instructor may do with him and for him. It is not enough, in teaching a child to read, to correct with a harsh voice some gross error which he may make in reading a verse or two in the New Testament or the National Reader. The teacher must himself, patiently, kindly, and with a gentle voice, read the passage over repeatedly, and see that the learner understands the meaning of every word, and of the whole sentence. It is peculiar to arithmetic, that though there are degrees of readiness in performing its operations, there are no degrees of clearness and certainty in the knowledge of its principles. The incredible vexation which attends the study of this branch with many children, generally arises from the unskillfulness of the teacher, in not taking care that the learner, as he goes along, understands thoroughly each successive step. If this be done, the child of ten years old will know what he knows at all as well as Sir Isaac Newton. Some simple schoolboy muse, in former times, has recorded its sorrowful experience on this subject in the following plaintive and, in my day, very popular strain—

"Multiplication is vexation,
Division is as bad,
The rule of three doth puzzle me,
And practice makes me mad."

But if proper care be taken that every step be thoroughly understood before advancing to the next, multiplication and division will be found as simple as addition or subtraction; while the rule of three and practice have been shown, in the recent and best school books, to be wholly unnecessary, inasmuch as all questions usually performed by their aid can be more readily performed by simpler processes.

One thing is certain; that though there can be no difference in the average capacity of equal numbers of the children in two schools in the same community, there is often a vast difference in the average scholarship, after the same amount of schooling. To what can the difference be ascribed, but to the different degrees of skill on the part of teachers? It is not an uncommon thing to find children who, after having been months, and even years, employed either on the lower elements or on the higher branches of learning, leave school, at last, knowing nothing thoroughly, and not much superficially. They can not read with fluency, force, and intelligence, to say nothing of grace and beauty; they write a poor, unsteady, hieroglyphical hand; they have no clear notions of grammatical construction, and are awkward and incorrect in the use of numbers. Perhaps this is the description of nearly half the children who leave school in town or country. The little that is learned of Latin and Greek is equally inaccurate and shallow. The fault is commonly laid at the pupil's door, especially if he has had what is usually called schooling enough. I think, however, generally, that the fault is with the teacher, who is frequently not thoroughly versed himself in what he undertakes to teach—more frequently unskilled in the art of teaching. The astonishing difference sometimes noticed in the progress of the same school under different teachers, in successive seasons, shows how much is justly attributable to this cause.

Besides the general art of teaching, there are peculiar methods, applicable to each branch of knowledge, which should be unfolded in the instructions of a Normal School; but this is a topic in which my limits do not permit me to engage. I hasten to

3. The third branch of instruction to be imparted in an institution, which concerns the important subject of the government of the school, and which

might perhaps more justly have been named the first. The best method of governing a school—that is, of exercising such a moral influence in it as is most favorable to the improvement of the pupils—will form a very important part of the course of instruction designed to qualify teachers for their calling. It is this part of their duty which is probably least considered by themselves or their employers; for the reason, perhaps, that qualification in this respect is least capable of being estimated by an external standard. But how much is not implied in the words "to govern a school!" For several hours in the day, the teacher is to exercise the authority of a parent over fifty or sixty, perhaps over ninety or a hundred children. Parents can form an opinion whether this is a task to be executed without system, without principles, and as a matter of course; or whether it is not that in which the youthful teacher will most stand in need of all the preparation which it is possible to acquire. Without the aid of that instinct of natural affection which fortifies parental authority, he is expected, with a parent's power, to control alike the docile and the obstinate, the sullen and the gay. While his entire intercourse with his pupils is that of constraint and requisition, he must acquire an absolute control over many a youthful spirit, which has already been irritated by caprice, soured by tyranny, or spoiled by indulgence at home. And he is to do this not by violence and storm, but by wisely threading the maze of that living labyrinth, the affections of the youthful heart. In this department perhaps greater improvement has taken place of late years than in any other; there has been a general call for moral influence, instead of physical power. I do not say that this last should never be resorted to, but I trust the day is wholly past for that ferocious warfare between master and pupil which was once so general, and with no other effect than that of turning the teacher's office into a hateful tyranny, and the happy season of childhood into a long martyrdom. Dr. Johnson, in composing a legal argument to be used by another person, puts into his mouth the sentiment, "that a school can be governed only by fear." It would, I think, have been much nearer the truth to say, that a school can be governed only by patient, enlightened, Christian love, the master principle of our natures. It softens the ferocity of the savage; it melts the felon in his cell. In the management of children it is the great source of influence; and the teacher of youth though his mind be a storehouse of knowledge, is ignorant of the first principles of his art, if he has not embraced this as an elemental maxim.

But let it not be thought that these are smooth sayings, and that moral discipline is unattended with difficulty, and preferred by an indolent age for its comparative ease. The reverse is nearer the truth. To walk the rounds of the school with a ratan in the hand, to be bestowed as liberally on the thoughtless exuberance of youthful spirits, on the restlessness of the little urchin unused to his confinement, and on the mistakes of mere inadvertence or absolute ignorance, as on hardened perversity and resolute disobedience, is a much easier task than to graduate each of these cases on the scale of moral demerit, and to treat them accordingly. It is related of the late Dr. Bowditch, that he very early manifested that skill in numbers which afterward raised him to the level of the first mathematicians of the day. While quite a child at school, he performed a difficult sum in arithmetic with astonishing readiness. His schoolmaster was at once so ignorant of the mode of governing a school, and had so little acquainted himself with the powers of his pupil's mind, that he thought it impossible the task should have been performed without assistance, and asked who had helped him. On being told by young Bowditch that he had done it himself, the coarse tyrant severely chastised him for falsehood—a treatment well calculated to subvert the entire moral frame of a sensitive lad, but much more simple than it would have been for an understanding such as this master possessed to enter into a careful analysis of the capacities of his forward pupil.

The instruction of the Normal School will therefore dwell on the government of youth as of paramount importance; as that part of the teacher's duty which demands the rarest union of qualities, which most tries the temper, and I will add, when faithfully and judiciously performed, is most important in its results. Give me the child whose heart has embraced without violence the gentle lore of obedience, in whom the sprightliness of youth has not encroached on deference for authority, and I would rather have him for my son, though at the age of twelve he should have his alphabet to learn, than be compelled to struggle with the caprice of a self-willed, obstinate youth, whose bosom has become a

viper's nest of the unamiable passions, although in early attainments he may be the wonder of the day.

There are many other topics connected with the teacher's duty, on which it may be expected that instruction will be afforded in the Normal School. Among these is the all-important subject of direct instruction in morals and religion, the relations of teachers and parents, of teachers and the higher school authorities, and the duties of teachers to each other and to the community, and of the community to them, as the members of a respectable profession. I am necessarily prevented by the limits of the occasion from entering upon any of these subjects.

4. In the last place, it is to be observed, that in aid of all the instruction and exercises within the limits of the Normal School, properly so called, there is to be established a common or district school, as a school of practice, in which, under the direction of the principal of the Normal School, the young teacher may have the benefit of actual exercise in the business of instruction. This, of course, is a very interesting portion of the system; but I am obliged to dismiss it with this simple mention.

Such then, briefly, are the nature and objects of a Normal School, and such the manner in which it proposes to qualify teachers. We do not expect that it will work miracles; we shall be satisfied if it does good; and of this only we feel a reasonable degree of confidence, that no young man or young woman can pass even three months in the institution without leaving it better qualified for the business of instruction. We trust the result will be such as eventually to contribute to the improvement of our schools. We have spared no pains, with the means at our command, to secure in advance the confidence of an enlightened public. The talent, the services, and the distinguished character of the gentlemen to whom the schools already founded have been intrusted, are a pledge to the community of what may be expected from their labors in this cause. Among the fundamental principles laid down by the Board of Education for the government of the Normal Schools, it has been provided that a portion of Scripture shall be daily read; and it is their devout hope that a fervent spirit of prayer, pervading the heart of both principal and pupils, may draw down the Divine blessing on their pursuits.

I can not forbear, sir,* to express to you, on this occasion, the deep sense which is felt by the Board of Education of the importance of the trust which they have confided to your hands. I have the pleasure to assure you, that all their proceedings in reference to the school, and your own connection with it, have been entirely unanimous, and that a large measure of confidence is reposed both in your ability and disposition to fulfil their expectations. The reputation which you bring to this place, acquired by a long course of faithful labor in a highly responsible station elsewhere, (Bowdoin College) is a sufficient guaranty to the public of the services which may be expected from you in this new and untried position. On you and the highly respected principal of the Normal School at Lexington, (Mr. Cyrus Pierce,) it will depend at present, in no small degree, whether institutions of this description shall win the public favor, and be incorporated into our system of common school education. We are sensible of the deep responsibility which this consideration devolves upon you, and shall, at all times, extend to you, to the utmost of our power, the support and encouragement you may need. Should this effort succeed to improve our schools by the increased qualifications of our teachers, you will have the satisfaction of being the first in our country to engage in an enterprise of the most eminent usefulness. Ages may pass away before an opportunity will present itself of working greater good than will be effected by those in this generation, who shall lay the foundations of decided improvements in popular education. We commend you, sir, to the support of this enlightened community, and the care of a watchful Providence.

To you, my young friends of either sex, who have entered yourselves as pupils of the Normal School, we would say that the eyes of the friends of education, in all parts of the commonwealth, will be anxiously fixed upon you, and those who, with you, may be among the first to take advantage of the means of improvement which this institution affords. You are about to prepare yourselves, under great advantages, for the important office of instruction. This

* Professor S. P. Newman.

momentous trust, which hitherto, almost without exception, in this country, has been assumed without specific preparation, will be approached by you, after having had its principles carefully unfolded to you, with some opportunity of putting them to practice, in the model school, which will form a part of the institution. When you shall engage in the business of instruction, the community will reasonably expect of you that you should exhibit unusual fitness for the work. Let this thought engage you to enter upon your studies with redoubled zeal. A failure on your part to meet the public expectation, will have an injurious effect, for some time, on this attempt to improve the qualifications of teachers, in institutions expressly devoted to that object. On the other hand, your spirit and devotion to the object you are pursuing, and your visible improvement in the noble skill of aiding in the development of mind and the formation of character, while they will put you upon the path of acknowledged usefulness and prosperity, will contribute essentially to the permanent adoption of Normal Schools, as a part of the Massachusetts system of public education. May a higher motive than human approbation animate your conduct, and the Divine blessing crown your studies with success.

Permit me, fellow-citizens and friends, in bringing this address to a close, to congratulate you on the establishment, in the bosom of this community, of an institution, destined, we trust, to be an instrument of great good. We place it under the protection of an intelligent public. Its organization is simple; its action will be wholly free from parade and display; its fruits, we trust, will be seen in raising the standard of common school education. This object, we confess, we regard as one of paramount importance,—second to no other not immediately connected with the spiritual concerns of man. If there be any persons to whom the words "common schools" and "common school education" convey an idea of disparagement and insignificance, such persons are ignorant, not merely of the true character of our political system, but of the nature of man. I certainly intend nothing derogatory to our higher seminaries of education, in town or in country. They are recognized by the constitution of the state. It is made the duty of all magistrates to encourage and promote them, and they are justly strong in the public favor. But whether we consider the numbers who enjoy their benefit, the relative importance to the state of an entire well-educated population, and of the services of those who receive the advantages of an education at the higher seminaries, taken in connection with the fact that a liberal education may be had elsewhere, but that a common school education must be had at home or not at all, no rational man, as it seems to me, can fail to perceive the superior importance of the common schools. They give the keys of knowledge to the mass of the people. The child learns more by his fourth year, than the philosopher at any subsequent period of his life; he learns to affix an intelligible sign to every outward object and inward emotion, by a gentle impulse imparted from his lips to the air. In like manner, I think it may with truth be said, that the branches of knowledge taught in our common schools, when taught in a finished, masterly manner,—reading, in which I include the spelling of our language,—a firm, sightly, legible handwriting, and the elemental rules of arithmetic, are of greater value than all the rest which is taught at school. I am far from saying that nothing else can be taught at our district schools; but the young person who brings these from school can himself, in his winter evenings, range over the entire field of useful knowledge. Our common schools are important in the same way as the common air, the common sunshine, the common rain, invaluable for their commonness. They are the corner-stone of that municipal organization which is the characteristic feature of our social system; they are the fountain of that widespread intelligence, which, like a moral life, pervades the country; they are the nursery of that inquiring spirit to which we are indebted for the preservation of the blessings of an inquiring, Protestant, spiritual faith. Established as they were by special legislation in the infancy of the colony, while they are kept up and supported with a liberality corresponding with the growth of the country, no serious evil can befall us. Whatsoever other calamities, external or internal, may overtake us, while the schools are supported, they will furnish a perennial principle of restoration. With her three thousand district schools, supported at the public expense, nothing but the irreversible decree of Omnipotence can bring the beaming forehead of Massachusetts to the dust. Vicissitudes may blight the foliage, but there will be vigor in the trunk, and life at the root.

Talent will constantly spring up on her barren hill-sides, and in her secluded vales, and find an avenue, through her schools, to the broad theatre of life, where great affairs are conducted by able men. Other states may exceed her in fertility of soil, but the skillful labor of her free citizens will clothe her plains with plenty. Other states may greatly outnumber her, but her ingenuity will people her shady glens and babbling waterfalls with half-reasoning engines, which will accomplish the work of toiling myriads. Other states will far surpass her in geographical domain; but the government of cultivated mind is as boundless as the universe. Wheresoever on the surface of the globe, and in the long line of coming ages, there is a reasonable being, there is a legitimate subject of mental influence. From the humblest village school, there may go forth a teacher who, like Newton, shall bind his temples with the stars of Orion's belt,—with Herschel, light up his cell with the beams of before undiscovered planets,—with Franklin, grasp the lightning. Columbus, fortified with a few sound geographical principles, was, on the deck of his crazy caravel, more truly the monarch of Castile and Arragon, than Ferdinand and Isabella, enthroned beneath the golden vaults of the conquered Alhambra. And Robinson, with the simple training of a rural pastor in England, when he knelt on the shore of Delft Haven, and sent his little flock upon their gospel errantry beyond the world of waters, exercised an influence over the destinies of the civilized world which will last to the end of time.

IX. FRANCIS WAYLAND.

EDUCATIONAL LABORS AND PUBLICATIONS.

Francis Wayland, son of Francis and Sarah Wayland, was born in the city of New York, March 11, 1796. His father was a Baptist clergyman, eminent among his brethren for sound judgment, transparency of character, and decided piety. The son passed the years of his early boyhood in his native city. His father having removed to Poughkeepsie, he became a member of the Academy in that town, then under the charge of Daniel H. Barnes. To this instructor, he has been accustomed to express great indebtedness. The schools of New York were not at that time of the character which they have since attained, and hence the thorough instruction of Mr. Barnes was the more highly prized. This honored man died suddenly and by accident, in the strength of his manhood, more than thirty-five years ago; but not a few of his pupils still survive and cherish his memory with grateful affection.*

Young Wayland remained in the Academy at Poughkeepsie until he entered Union College near the close of the Sophomore year in 1811, and he graduated in 1813, at the age of seventeen years, being a member of the ninth class that graduated under the presidency of Dr. Nott. He had already made choice of the profession of Medicine, and immediately after leaving college, entered the office of Dr. Eli Burritt of Troy. Having pursued medical studies for three years, he was licensed to practice the profession.

But God had another service for him to perform. About the time of completing his studies with Dr. Burritt, he became personally interested in the salvation wrought by Christ; and being influenced, as he believed, by the Holy Spirit, he not only devoted his life to the glory of God, but commenced preparation for the work of the Christian ministry. He abandoned the calling for which he had already made laborious preparation, and in which he had fair prospects of eminence and emolument, and in the fall of 1816 entered the Andover Theological Seminary. He has always counted it a great advantage that he was thus brought under the immediate influence of that

*Memoir by Gulian C. Verplanck, Am. Journal of Education, Vol. XIV.

enthusiastic scholar and accomplished teacher, Prof. Moses Stuart. Drs. Porter and Woods were at that time members of the Faculty, but the Junior Class, to which Mr. W. belonged, was almost wholly under the instruction of Prof. Stuart, whose personal kindness no less than his acuteness of mind and power to kindle enthusiasm, his pupil has ever gratefully acknowledged.

At the close of the first year, he left the Theological Seminary, partly because he was unable to meet the expense of remaining there, and partly because he had been invited to return to Union College as a tutor. The four years that he spent as a tutor exerted a great influence on his future course. He taught, more or less, in nearly all the branches comprised in the college course, and therefore was obliged to increase his acquaintance with a wide range of studies. He was brought into relations of daily intercourse with several men of pre-eminent ability, whose friendship was then regarded by him as highly valuable, and proved to be the beginning of a life-long mutual respect and confidence. Among these was Alonzo Potter, whom he had first met at Mr. Barnes' school in Poughkeepsie, and who is now Bishop of the Protestant Episcopal Church in Pennsylvania. Mr. Potter was a fellow-tutor during the last two years of Mr. Wayland's service. But by far the most important influence to which he was subjected during these four years, was that of the incomparable President of the College. Dr. Nott's knowledge of human nature, his wonderful power of personal influence, his devotion to learning, and his own pure and noble character, amply qualified him to be the guide and friend of young men. We can easily see how the intercourse of two such men as Eliphalet Nott and Francis Wayland, one of them forty-four and the other twenty-one years of age, brought into daily contact with one another, must not only have been pleasant and profitable to both, but must also have exerted a great influence on the habits and modes of thought, and subsequent life of the younger. Both as a teacher and as a candidate for the ministry, the tutor derived much valuable assistance from the President, for Dr. Nott was at once an eloquent preacher and a most successful teacher and disciplinarian.

His position as a tutor was, however regarded by him as only temporary, while he was looking forward to the Christian ministry as his life-work. And, not willing to defer to the future all efforts after ministerial usefulness, he was in the habit of preaching at the little village of Burnt Hills, at that time destitute of any regular preacher. At the close of his four years' service as tutor, he was invited to the pastoral care of the First Baptist Church in Boston, and having accepted the call, was ordained pastor, August 29, 1821.

The object of this sketch does not require us to speak of his work as a Christian pastor. It is enough to say that for five years he performed the duties of this office, at least with ordinary fidelity, and not without success. While his style of preaching was not particularly popular, it was marked with vigor and clearness of thought, and was not destitute of the graces of rhetoric. His labors as an adviser and guide of his people were highly esteemed, particularly by the poor and the sick. If the affectionate attachment of a people, and their Christian confidence and respect, are in any measure a test of ministerial success, Mr. Wayland's ministry in Boston was not a failure.

It was during this ministry that he preached his sermon on the Dignity of the Missionary Enterprise, which, although first delivered before a very meagre audience, was published shortly after, and placed him, in the public estimation, among the most able and eloquent of American preachers. He was, at the time of preparing this discourse, but twenty-seven years of age. But while this effort awakened the admiration of many, it probably exerted no small influence in arousing an interest in foreign missions, and perhaps it is not too much to say that from its delivery and publication is dated a new era in the missionary work.

In 1826, Mr. Wayland resigned his pastoral charge, intending at no distant day to resume the work of the ministry. He accepted an invitation to return to Union College as the successor of his friend Alonzo Potter in the Professorship of Mathematics and Natural Philosophy. He had, however, scarcely entered on the duties of this office, when he was called to another sphere of labor in which he was to accomplish the great work of his life. He was chosen President of Brown University, and having assumed the duties of this responsible position in February, 1827, he continued in office and in the constant labors belonging to the office, during the next twenty-eight and a half years.

It is, of course, chiefly as the President of Brown University that he has given proof of his ability as a teacher,—an ability which has never been questioned from the day of his inauguration, and to which the history of the College during his administration amply testifies. The circumstances in which he found the college were by no means favorable. It was scantily endowed, had almost no philosophical or chemical apparatus, had a very small library, and had no adequate means of enlarging the facilities for instruction. The number of students had been quite large during the last years of Dr. Messer's administration, and the average number of graduates during his entire term of service, extending over twenty-four years, was not less than

during the administration of Dr. Wayland. Dr. Messer has been characterized by his successor as "a scholar of profound and varied learning, as well as an instructor of singular ability."* Yet the condition of the college was far from satisfactory. Without staying to inquire into the causes of the fact, we must nevertheless admit that the last two or three years of Dr. Messer's term of service were marked by a large share of idleness, dissipation and recklessness on the part of many students. Influences beyond the reach of the President rendered a salutary discipline impossible, and the results were, as might have been predicted, disastrous alike to the moral and intellectual character of the students.

Such were some of the circumstances under which President Wayland commenced his official duties at Brown University. But unpromising as these circumstances were in one point of view, they were, in another aspect, quite favorable, if rightly used, for inaugurating a new administration. There was room for great improvement, and the friends of the College were ready to second every suggestion which seemed to conspire to that end. The reputation of the President had preceded him. His sermon on the Dignity of the Missionary Enterprise had gained for him a wide celebrity, and had prepared the way for a most effective influence in moulding the character of young men. More than all, the man was equal to the exigency. Order, study and discipline took their appropriate place, and it was soon found that a new administration had begun. The larger part of the students not only acquiesced in the change, but rejoiced in the beneficial result. There are men now in high position who ascribe their success in life to the influence of Dr. Wayland in recalling them from the worse than waste of time, and inciting them to assert their manhood by a new course of conduct.

As he began, so he continued through all the years of his term of office. Serious disorder among the students was never attempted, or if attempted, was suppressed before it was matured. It was understood by all connected with the College that the President was well acquainted with human nature, and that his estimate of the characters of the different students was rarely false. If any offense was committed which demanded official notice, the offender was almost sure to be known, or if not known, so far suspected as to be placed under effectual restraint. A look of reproof from under the dark eyebrows of the President was often enough to produce deep conviction, if not reform. The writer of this sketch well remembers an instance of this silent influence. A student who was addicted to the use of tobacco

* Discourse on the Life and Character of Nicholas Brown, p. 22.

had soiled the floor of the recitation-room near his own seat, so as to annoy those near him. The President had undoubtedly noticed the first instance of such disregard of decency, but seemed to take no notice of it until the offense had been repeated. Then, when a pause in the recitation occurred, he called the student's name, and without uttering another word, kept his finger pointed to the soiled floor perhaps for half a minute, while his eyes were fastened with a look of intense reproof upon the culprit. We could hardly imagine any words which would have been so complete and withering a rebuke.

It is always a difficult matter to maintain order in a college, especially if the students reside in the college buildings, and to restrain the tendencies to lawlessness which are encouraged by their forming a community by themselves, to some extent outside of the ordinary appliances of law. A sort of sentiment, not to say an opinion, seems to prevail among college students, that college property is not secured by the same safeguards as the property of their parents at home,—that *they* are not amenable to the laws which forbid trespass or stealing,—and that it is in some sense right for the higher classes to interfere with the comforts and peace of Freshmen. No such sentiments were allowed to have currency during the presidency of Dr. Wayland. There was no hazing of the Freshmen, except in few and feeble instances, which from their infrequency and ill-success only served to illustrate the general freedom from such crime. There was almost no wanton destruction of college property. Depredations upon the property of persons in the vicinity of the college, if committed at all, were carefully concealed from all but the small party concerned in them. The great majority of the students never knew of such depredations, nor suspected them. Probably there were many years during which no single instance of such lawlessness occurred. It was understood that Dr. Wayland had no sympathy with any thing in the least degree dishonorable, and that he would not wink at any offenses committed by the students. The influence which he acquired over them did not come from strong personal affection for himself, awakened in them; for he was not accustomed to cultivate any such feeling. Very few students knew the depths of his heart, or understood any thing of the genial nature that has always attached him to his intimate associates. His influence over the young men arose partly from his majestic presence, but mainly from that imperial spirit, corresponding with the external presence, the existence and power of which every one perceived who came in contact with him. It is not easy to analyze such an influence. It can not be acquired by any man in whom it is not native. Dr. Wayland was so constituted that he could not fail to

exert a commanding influence in whatever position he was placed. The young men connected with the college might sometimes grumble about his rough treatment of them, or his arbitrary decisions; but there was not one among them who would not have counted it a great distinction to receive a token of his approval,—not one who ever seriously questioned either his integrity or his high sense of honor,—not one who did not feel proud of the President.

While such an administration of the government of the college attested Dr. Wayland's fitness for the Presidency, his ability as a teacher was perhaps even more marked. He had a very definite conception of the object to be sought in a collegiate education, and indeed in all education, and this conception determined his method of instruction. He regarded the discipline of the faculties as more important than the acquisition of knowledge; and while both these were included in his idea of education, he directed his chief efforts as a teacher towards the former. His discourse before the American Institute of Instruction, delivered in August, 1830, (which is re-published in connection with this sketch,) so fully and clearly sets forth his ideas of what education should be, that little needs be said here respecting that idea. It should be said, however, that his own practice as an educator conformed entirely to that idea. The following extract from the preface to the second edition of his Moral Science, indicates his method of conducting a recitation.

Having understood that the work has been introduced, as a text-book, into some of our highest seminaries of education, I hope that I may be forgiven if I suggest a few hints as to the manner in which I suppose it may be most successfully used for this purpose.

1. In the recitation-room, let neither instructor nor pupil ever make use of the book.

2. Let the portion previously assigned for the exercise be so mastered by the pupil, both in plan and illustration, that he will be able to recite it in order, and explain the connection of the different parts with each other, without the necessity of assistance from his instructor. To give the language of the author is not, of course, desirable. It is sufficient if the idea be given. The questions of the instructor should have respect to principles that may be deduced from the text, practical application of the doctrines, objections which may be raised, &c.

3. Let the lesson which was recited on one day, be invariably reviewed on the day succeeding.

4. As soon as any considerable progress has been made in the work, let a review from the beginning be commenced. This should comprehend, for one exercise, as much as had been previously recited in two or three days; and should be confined to a brief analysis of the argument, with a mere mention of the illustrations.

5. As soon as the whole portion thus far recited has been reviewed, let a new review be commenced, and continued in the same manner; and thus on successively, until the work is completed. By pursuing this method, a class will, at any period of the course of study, be enabled, with the slightest effort, to recall what-

ever they have already acquired; and when the work is completed, they will be able to pursue the whole thread of the argument, from the beginning to the end; and thus to retain a knowledge, not only of the individual principles, but also of their relations to each other.

But the advantage of this mode of study is not confined to that of a more perfect knowledge of this or of any other book. By presenting the whole field of thought at one view before the mind, it will cultivate the power of pursuing an extended range of argument; of examining and deciding upon a connected chain of reasoning; and will, in no small degree, accustom the student to carry forward in his own mind a train of original investigation.

I have been emboldened to make these suggestions, not in the least because I suppose the present work worthy of any peculiar attention from an instructor, but simply because, having been long in the habit of pursuing this method, and having witnessed its results in my own classes, I have thought it my duty to suggest it to those who are engaged in the same profession with myself. Other instructors may have succeeded better with other methods. I have succeeded best with this.

The method thus indicated he caused to be introduced into all the recitations of the college to which it is applicable. In the use of this method, the classes generally passed over less ground than is common in other colleges, but could not fail to understand the relations of each part to the whole, and to be able to take in at one view the whole discussion. Especially this method cultivates in the student the power of analysis. If he is required to state the substance of each paragraph in its proper relation to that which precedes and to that which follows, he must fully understand its meaning and its bearing upon the rest. He learns to perceive the exact significance of each section and sentence, to discriminate between thoughts which resemble each other, and to analyze trains of thought. His own conceptions become well defined. He acquires the power of abstraction. A Justice of the Superior Court of Massachusetts, who is a graduate of Brown University, once said in reference to a certain witness, "If I had not known such to be the fact, I should have suspected that the man was one of Dr. Wayland's students, from the way in which he discriminated between things which are often confounded."

The leading characteristics of Dr. Wayland's own mind are such as this method of study naturally develops. His power of abstraction is great, and his perception of qualities is clear. The writers with whom he is most familiar are the great masters of thought, whose minds resemble his own. He seems to be more in sympathy with Bacon and Butler, in the spirit of their philosophy, than with any other of the merely human teachers of mankind.

In addition to his work as a governor and teacher of the college, Dr. Wayland gave himself with energy and wisely directed effort to the increase of its facilities for educating young men. Its pecuniary

condition on his accession to the presidency, has already been stated in general terms. One of his earliest enterprises was to increase the library and to procure suitable philosophical apparatus. In 1831, a subscription amounting to nearly $20,000 was obtained for these purposes, and this sum invested until its accumulated interest had raised it to $25,000. The munificent friend of learning from whom the college took its name, furnished $10,000 of this sum, and the remainder was obtained chiefly through the exertions of Dr. Wayland and Prof. Caswell.

The next great need of the college was a building for the library. This want was supplied in 1834, when Mr. Brown at his own expense erected Manning Hall,—a beautiful building designed for a library and a chapel. In 1840, Rhode Island Hall, built by the subscriptions of Rhode Island men and women, for the accommodation of the Departments of Chemistry and Natural Philosophy, was added to the other college edifices. The same year, the President's house was removed from the college enclosure; the grounds were laid out and planted with elms, and a new house for the President was erected, near their main entrance, at the head of College street.

But, in the meantime, Dr. Wayland's ideal of what a college should be was by no means met. The number of students did not increase, but actually diminished; the annual expenses had become greater than the annual income; in the opinion of the President, many defects in the prevailing college system existed. He believed that the character of the education afforded was not what it ought to be, and that its benefits were restricted to a small class when they might be enjoyed by many. His views on this subject were first given to the public in 1842, when he published a small volume entitled "*Thoughts on the Present Collegiate System in the United States.*" But no change was wrought in the organization of Brown University until several years later.

In 1849, despairing of any essential improvement so long as the existing system was perpetuated, Dr. Wayland resigned the Presidency. His resignation was presented, not for the sake of testing any question, or of leading the Corporation to institute any changes, but in entire good faith, and with a full anticipation of its acceptance. They, however, considering the continuance of his services important for the prosperity of the College, hesitated to release him, and desired to know if he might not be prevailed upon to remain in the office. The way was thus opened for stating freely the reasons of his resignation, and for suggesting such changes as he believed were essential for the largest usefulness of the College. The Board appointed a

committee, of which the President was chairman, to propose any changes which might be thought needful in the system of education in the University. This committee, in March, 1850, presented to the Corporation a report presenting the President's views, and recommending changes to correspond with those views. This report,* an octavo pamphlet of 76 pages, reviews the history of our American Colleges as built upon the model of the English University, with such changes, however, as have stripped the English system of its advantages, leaving the time of the college course unaltered, but putting into it such a variety of studies as to preclude the possibility of a thorough mastery of any one. The report proceeds to set forth the inadequacy of the American system to the wants of the public, on the ground that it is designed only or mainly for the professional classes, while the mercantile and literary classes are virtually excluded from the benefits. The following extract states the views of the President:

A second method of relieving the institution from its present embarrassments has been proposed, suggested from the view which your committee has been led to take by the present condition of collegiate education in New England. If it be the fact that our colleges can not sustain themselves, but are obliged to make repeated calls upon the benevolence of the community, not because the community is poor and education inordinately expensive, but because, instead of attempting to furnish scientific and literary instruction to every class of our people, they have furnished it only to a single class, and that by far the least numerous; if they are furnishing an education for which there is no remunerative, but even at the present low prices, a decreasing demand; if they are, not by intention, but practically, excluding the vastly larger portion of the community from advantages in which they would willingly participate, and are thus accomplishing but a fraction of the good which is manifestly within their power,—then it would seem that relief must be expected from a radical change of the system of collegiate instruction. We must carefully survey the wants of the various classes of the community in our own vicinity, and adapt our courses of instruction, not for the benefit of one class, but for the benefit of all classes. The demand for general education in our country is pressing and universal. The want of that science, which alone can lay the foundation of eminent success in the useful arts, is extensively felt. The proportion of our young men who are devoting themselves to the productive professions, is great and annually increasing. They all need such an education as our colleges, with some modifications in their present system, could very easily supply. Is there not reason to believe that, if such an education were furnished, they would cheerfully avail themselves of it?

Were an institution established with the intention of adapting its instruction to the wants of the whole community, its arrangements would be made in harmony with the following principles:

1. The present system of adjusting collegiate study to a fixed term of four years, or to any other term, must be abandoned, and every student be allowed, within limits to be determined by statute, to carry on, at the same time, a greater or less number of courses as he may choose.

* Report to the Corporation of Brown University, on Changes in the System of Collegiate Education. Prov., 1850.

2. The time allotted to each particular course of instruction would be determined by the nature of the course itself, and not by its supposed relation to the wants of any particular profession.

3. The various courses should be so arranged, that, in so far as it is practicable, every student might study what he chose, all that he chose, and nothing but what he chose. The Faculty, however, at the request of a parent or guardian, should have authority to assign to any student such courses as they might deem for his advantage.

4. Every course of instruction, after it has been commenced, should be continued without interruption until it is completed.

5. In addition to the present courses of instruction, such should be established as the wants of the various classes of the community require.

6. Every student attending any particular course, should be at liberty to attend any other that he may desire.

7. It would be required that no student be admitted as a candidate for a degree, unless he had honorably sustained his examination in such studies as may be ordained by the corporation; but no student would be under any obligation to proceed to a degree, unless he chose.

8. Every student would be entitled to a certificate of such proficiency as he may have made in every course that he has pursued.

The courses of instruction to be pursued in this institution might be as follows:

1. A course of instruction in Latin, occupying two years.
2. " " in Greek, " "
3. " " in three Modern Languages.
4. " " in Pure Mathematics, two years.
5. " " in Mechanics, Optics, and Astronomy, either with or without Mathematical Demonstrations, one and a half years.
6. " " in Chemistry, Physiology, and Geology, one and a half years.
7. " " in the English Language and Rhetoric, one year.
8. " " in Moral and Intellectual Philosophy, one year.
9. " " in Political Economy, one term.
10. " " in History, one term.
11. " " in the Science of Teaching.
12. " " on the Principles of Agriculture.
13. " " on the Application of Chemistry to the Arts.
14. " " on the Application of Science to the Arts.
15. " " in the Science of Law.

Some of these courses would require a lesson or lecture every working day of the week, others only two or three in the week. Any Professor might be allowed to conduct the studies of more than one course, if he could do it with advantage to the institution.

Should this idea be adopted, and the instruction given in this college be arranged on these principles, it would be seen that opportunity would be afforded to modify it as experience should prove desirable. Some courses may be abridged or abolished, and others added or extended. The object of the change would be to adapt the institution to the wants, not of a class, but of the whole community. It by no means is to be taken for granted, in a country like our own, that every college is to teach the same studies, and to the same extent. It would be far better that

each should consult the wants of its own locality, and do that best for which it possessed the greatest facilities. Here would arise opportunity for diversified forms of excellence; the knowledge most wanted would the more easily become diffused, and the general progress of science would receive an important impulse from every institution of learning in our land.

As the adoption of the plan recommended by the report involved a considerable outlay, and indeed the college without any change of system demanded an increase of its funds, it was proposed to raise by subscription the sum of $125,000. The success of the subscription was at the outset rendered almost certain by the munificence of a few individuals, who, without solicitation, came forward and pledged sums to the amount of $65,000, on condition that the remainder should be subscribed by responsible persons on or before the 5th day of September, 1850. The whole sum was raised in four months, mostly in the city of Providence, with an alacrity and readiness that attested the confidence which was felt in the proposed plan and its author.

Under the new system the college commenced the academical year 1850–1; and during the second term of that year the number of students had increased to 195. From that time to the resignation of Dr. Wayland, the average number of students was 249.

His resignation, which was sent to the Corporation at a special meeting held on the 21st of August, 1855, was a matter of indispensable necessity, in the judgment of his physician, and was accepted with sincere sorrow. The following resolutions passed at that meeting indicate the sentiments of the Corporation in dissolving their official connection with the President:

WHEREAS, the Rev. Francis Wayland, D.D. LL. D.,* has tendered to this Corporation his resignation of the offices of President of Brown University and Professor of Moral and Intellectual Philosophy;

Resolved, That in accepting this resignation, the Corporation deem it proper to express their high sense of the fidelity, ability, singleness of purpose, and eminent success with which he has discharged the varied and important duties of his appointment—manifesting at all times his entire devotion to the welfare of the University—with unwearied assiduity watching over its interests—imparting to the students who have been educated here, the rich treasures of his cultivated and original mind—imbuing them with that intellectual and moral culture which prepares for the fulfillment, with dignity and honor, of the duties which appertain to them as citizens, and giving them that religious instruction which qualifies for the discharge of their paramount duties to God.

Resolved, That while we deeply feel the privation to which we shall be subjected in being officially separated from President Wayland, we rejoice in the belief that he will, in his retirement, continue to advance the cause of education, to promote, in an enduring form, the extension of knowledge and to benefit his fellow men by his matured counsels and ripened wisdom.

Resolved, That we tender to him the assurance of our sincere regard, unwavering confidence, and entire respect.

On the following Commencement, the Chancellor of the University,

* Pres. Wayland received the degree of D.D. from Union College in 1827, and from Harvard College in 1829; and the degree of LL. D. from Harvard College in 1852.

Samuel Boyd Tobey, M. D., in presenting to Dr. Wayland a copy of the above resolutions accompanied them with remarks from which we make the following extracts.

It would be unpardonable in me to occupy time in reviewing the changes that have taken place in the University since the accession of Dr. Wayland to the Presidency. The establishment of the Library upon a firm basis, insuring its steady augmentation and ultimate greatness—the increased means of illustrating and demonstrating the truths of science by the very perfect and extended philosophical and chemical apparatus—the creation of several new professorships—the erection of Manning Hall, Rhode Island Hall, and the new and commodious house for the occupancy of the President—the vastly improved appearance of the College grounds—the substitution of the graceful elm for the unsightly poplar—the establishment of premiums for excellence in scholarship—the recent munificent endowment by the spontaneous liberality not only of the members of the Corporation, but of numerous other contributors, by which the new departments of science have been established, enabling those who can not attend a full course of Collegiate study to prepare themselves for their chosen pursuits in life—and above all, the elevation of the whole standard of instruction and the intellectual and moral tone of the College—all these are themes which are naturally suggested by the present occasion, but on which we are forbidden to dwell. Aided by a learned, indefatigable and devoted Faculty—by a Corporation zealous in the cause of education—these, with the blessing of Heaven, are some of the important achievements of the President—these are the fruits of the ceaseless assiduity, skill and care with which he has administered the affairs of the University. They are enduring in their effects, and their good influences may now be seen in the characters of those whom he has trained for the duties of life, and who delight to honor him as their "guide, philosopher and friend." These labors, which he has so diligently prosecuted have also secured for him the lasting gratitude and affection of the students who during the successive years of his Presidency have gone forth from the shades of the University. They have borne into the various walks of life the enlarged and generous views, the lofty and liberal spirit which he has imparted to them. His aim has been not to kindle within them the fires of a selfish ambition, but to teach them how to labor for others' good—to lead them to no idolatry of human reason, but to the worship of God—to set before them not the deceitful dogmas of a sceptical philosophy, but the pure precepts of the Gospel of Christ, applied to the varied and manifold relations of men. * * * *

President Wayland,—on receiving thy resignation of the Presidency of Brown University and Professor of Moral and Intellectual Philosophy, a series of resolutions with some prefatory remarks were offered which the Corporation unanimously accepted, and directed that they be recorded and a copy of them furnished to thee. Believe me, when I assure thee, that they are not the record of mere formal words, but that they embody the heartfelt sentiments of those who have so long and so happily labored with thee to promote the interests of the College. They but feebly convey our sense of the good thou hast accomplished.

The Chancellor here read to the audience a certified copy from the records of the action of the Corporation on the resignation of President Wayland, and closed his address in the following words:

In accordance with the instructions of the Corporation, I now present thee President Wayland, with an official copy of these resolutions and the introductory address as spread upon the records.

Be pleased to accept from me personally, the expression of my fervent desire that the Preserver of men may continue to guide, protect and keep thee, and that as in days that are past, we may in time to come still be often permitted to take "sweet counsel together."

Rev. Dr. Wayland replied as follows:

MR. CHANCELLOR:

I beg you to accept for yourself and for the gentlemen with whom you are associated my grateful acknowledgments for the kindness with which you have been pleased to estimate my imperfect services.

If the Corporation of Brown University believe that I have faithfully endeavored to do my duty, I desire no higher earthly reward.

At a meeting of the Alumni of Brown University, held in Manning Hall, on Tuesday, the 4th of September, 1855, it having been announced that the Rev. Dr. Wayland had resigned the office of President of the University, the following resolutions, presented by Hon. Benjamin F. Thomas, LL. D., and seconded by Hon. John H. Clifford, LL. D., were unanimously adopted.

Resolved, That the Alumni of this University have heard with profound regret that Francis Wayland has retired from the office of its President.

Resolved, That his clear, strong mind, his accurate learning, his vigorous common sense, his energetic will, his thorough knowledge of the interests and wants of the country and of the age, and his endowment, in so large a measure, with that rarest of all faculties, the power to teach, to cast other minds in the mould of his own, admirably fitted him for the duties of his great office. And that we review to-day with pleasure and pride, his long, rich and successful administration, gratefully recalling his generous, unwearied self devotion to the welfare of the University, the new and lasting impulse he gave to all her interests, the enlargement of her sphere and capacities of usefulness, the impression of his own mind and character he made upon so many of his pupils, the respect and honor he has acquired in the world of letters and reflected upon the University.

Resolved, That those of us whose great privilege it was to have been his pupils, bring to him the offering of filial love and gratitude. We thank him for the thorough fidelity with which he discharged his trust, for the vigorous discipline of mind and heart he sought to give us, for his affectionate interest in our progress, for his words of wisdom, counsel and reproof, and for the beautiful illustration of a true life given to God and duty, which his own example furnished us.

Resolved, That Dr. Wayland carries with him to his retirement, our earnest wish that there may be a long and happy evening to a manly and useful life, that he may be yet spared to render eminent service to the cause of religion and letters, and that the day may be far distant when the voice of affectionate greeting shall be changed to that of eulogy.

In presenting these resolutions to President Wayland, at the Commencement dinner, Sept. 5th, Judge Thomas addressed him substantially as follows:

I rise, Mr. President, for the discharge of a painful and yet a grateful duty. The Alumni of the University, having heard of your resignation of the office you have so long held with signal honor to yourself and signal advantage to her, met yesterday to give utterance to the feelings which that event naturally awakened. They passed resolutions (would they were worthier) expressing their sense of the value of your services to the College, and of the loss she has sustained by your retirement. They instructed their committee (Gov. Clifford, of New Bedford, Hon. Mr. Bradley of this city, and myself,) to present these resolutions to you to-

day, the last time we shall have the pleasure of meeting you in this near and interesting relation.

It is but little to say, that these resolutions were passed unanimously—there was but one mind and one heart in the assembly, and that mind and heart were but one—for the calmest result of the judgment was in harmony with the warmest feelings of the heart. We did not however forget that we were speaking of and to the living, and in avoiding what may be said to be the natural warmth of eulogy—that, we trust, far distant service to come from the trembling lips of some later pupils—we may have assumed a tone too subdued.

One of these resolutions comes from those whose privilege it was to have been your immediate pupils. Of that resolution, as one of the earlier of those pupils, I will say a word. I should be sorry if I thought myself capable of making a formal speech in an hour like this. You are, Mr. President, too largely my creditor for me to judge calmly and wisely. I can not pay the debt. I do not ask you to forgive it. I can and will confess it. More than twenty years ago it ripened into a judgment and yet no lapse of time will bar it. Hundreds around you owe the like debt. It grows ever. It is an investment for all time. If you see in it, as I know you do, the true riches, more than the wealth of an Astor is yours. Its bonds are stronger than those of the railroad, its pulse is quicker than that of the telegraph. It is the tribute of loving hearts. It is the debt of filial gratitude.

I came here to-day, Mr. President, to say now what I have often said at home and to my own pupils, and what this seems to me a fitting occasion to say more publicly.

It has been my privilege for three years to be your pupil. I have seen and have had other eminent masters; Joseph Story, whose name is identified with the jurisprudence of his country; John Hooker Ashmun, who, an invalid for years and dying at the early age of thirty-three, as a lawyer, left behind him no superior in Massachusetts, whose mind had the point of the diamond and the clearness of its waters; Pliny Merrick, who graces the bench on which I have the honor to sit, but of whom my near relation to him forbids me to speak as I would. A quarter of a century has passed since I left these walls with your blessing. I have seen something of men and of the world since. I esteem it to-day the happiest event of my life that brought me here, the best gift of an ever kind Providence to me; that I was permitted for three years to sit at the feet of your instruction.

Others may speak and think of the writer and scholar, my tribute is to the great teacher; and he is not the great teacher who fills the mind of his pupil from the affluence of his learning or works most for him, but who has the rarer faculty of dawing out and developing the mind of another and making him work for himself,—the rarest of all God's gifts to men. Great statesmen, great orators, great jurists are successful and useful in the degree that they are great teachers. Office of unequaled dignity and worth! even our divine Lord and Master we call the "Great Teacher."

Mr. President, if I have acquired any consideration in my own beloved Commonwealth, if I have worthily won any honor, I can and do with a grateful heart bring them to-day and lay them at your feet; *Teucro duce et auspice Teucro.*

These tributes paid to the services of Dr. Wayland, alike by the Corporation and the Alumni of the College, had the merit of perfect sincerity and perfect unanimity. It was no ordinary respect, and was paid to no ordinary man. It was the spontaneous expression of many

hearts, endorsed by every man who had ever been associated with the retiring President as a member either of the Corporation or the Faculty, and by every alumnus of the College.

For the sake of continuity in the history, we have thus far omitted all reference to the text-books prepared by Dr. Wayland. The first of these which he offered to the public was his "*Elements of Moral Science*," published in 1835. It is the most widely known, as well as the first of his College text-books. From the date of its publication, it was introduced into many American Colleges, and has been for nearly thirty years the leading text-book in its department. It has been re-published in England and Scotland, and translations of it are in use in Armenia, Greece, and the Sandwich Islands. It is too well known to need any statement of its method or its principles. It is peculiarly adapted to the mode of instruction which the author adopted, and is eminently clear and well analyzed. We have the impression that many students, after completing the College course, have regarded this as more nearly approaching perfection than any other text-books used by them in any department of study, while it has quickened the moral impulses of multitudes of young men, elevated their aspirations, and animated them with motives drawn from the spiritual world.

His "*Elements of Political Economy*," were published in 1837. For many reasons, this book did not meet with success so complete as that of its predecessor. The study itself is in its infancy, while the discussion of morals has occupied the minds of men from the earliest ages. The questions relating to political economy have also become involved in partizan warfare. It was not to be expected that the views of any author would be universally received. But the work is one of great value and admirably adapted to the recitation room, on account of the perfect clearness with which its views are presented, and the thorough analysis of the whole subject and of every chapter.

In 1854, he first gave to the public his "*Elements of Intellectual Philosophy*," although the substance of the book had been given to many successive classes in the lecture-room. His object in this work also was to furnish a suitable text-book, and in its preparation he kept this object steadily in view. It would demand much more space than is at our disposal, to give a detailed account of this work, or to state the position of the author in regard to the vexed questions of metaphysical research. It is enough to say that the characteristics of the book are those of the author, and while many books enter more profoundly or more minutely than this into the subtleties of the science, it may be doubted whether there is one from which a young man

could gain a more clear, or more just, or more comprehensive view of the elements of metaphysics.

Of the "*Moral Science*" and "*Political Economy*," abridgments have been published for the use of schools. Besides these, Dr. Wayland has published several works not directly educational, and therefore not particularly noticed here, making in all fourteen volumes.

It would be wrong to omit in this sketch a notice of his interest in popular education generally. Though he devoted his untiring energy to advance college education, yet every department of instruction awakened his deep interest. Nor was it a theoretical interest confined to general statements and fine-spun thoughts, without leading to practical results. With him, to feel was to act. Consequently, the common school, the high school, and the academy, all found in him a sympathizing friend, a skillful adviser, and a most efficient helper. He had not been long a resident of Providence, before he was appointed on a committee of his fellow-citizens, to examine and report on the condition of the public schools of the city, and to make such suggestions for their improvement as they should deem expedient.* Seldom has the argument for a broad and liberal system of public instruction been better stated.

The principle which should mainly direct the appropriation of public money is evidently equity. In other words, money raised by a tax upon every individual, should be so distributed that every individual should have an opportunity of participating in the benefits of its expenditure. Or, to apply the principle to the present case, if money is contributed by every citizen for the purpose of education, a school system should be so devised that every citizen should receive, not merely the general advantage of having his neighbors better instructed, but also an equitable share of that instruction which he assists to maintain. Now if this view of the subject be just, it will follow that there should be furnished a number of schools, sufficient to accommodate all who wish to avail themselves of their advantages. Every one sees the injustice of taxing the whole community to support one or two schools, to which not more than one-tenth part of the whole number of children could find admittance. The same injustice will evidently occur, if the number of scholars imposed upon a teacher be so great as to render his instructions of so little value that a large portion of the community is obliged to resort to private schools.

The same principle would dictate that there be established the various grades of schools suited to the wants of the public. If there be but one description of schools, it must either be so elevated that many of the parents can not prepare their children to enter it, or else so elementary that none would avail themselves of its advantages for any considerable length of time, or else every thing would of necessity be so imperfectly taught that a very small portion would be benefited. In either case, but a small portion of the community would receive the benefit of that provision which all were taxed to support. The first was the case in Boston, previous to the establishment of primary schools. The grammar schools admitted no one unless he could read in the Testament. But it was found by actual exam-

* See Journal of R. I. Institute of Instruction, Vol. III., pp. 46-52.

ination that a very great proportion of the poorer class were unable or unwilling to procure, at their own expense, this preparatory education for their children, and that thus many thousands were growing up in utter ignorance.

It may here be properly suggested, whether equity does not demand that the system of public education in this town should make provision for at least one school of a higher character,—a school which should provide instruction in all that is necessary to a finished education. If it be said that such a school would be of advantage only to the rich, it may be answered, as the rich contribute in an equal proportion to education, why should not they be entitled to a portion of the benefit? But it is far from being the case that such a school would be only for the rich. It would be as much a public school, as open to all, and as much under the government of the public, as any other. But it would evidently be of most peculiar advantage to the middling classes, and the poor. Such an education as we propose, the rich man can give, and will give to his son, by sending him to private schools. But the man in moderate circumstances can not afford to incur the heavy expenses of a first-rate school, and if no such provision be made, the education of his children must be restricted to the ordinary acquisition of a little more than reading and writing. With such a school as we have contemplated, he would be enabled to give his child an education which would qualify him for distinction in any kind of business.

And lastly, the principles of equity to which we have alluded would dictate that the public schools, of every description, should be well and skillfully taught. If this be not done, the result will be obvious. The funds by which they are supported are contributed by the rich, and by the middling classes of society. If they be badly taught, the rich will derive no benefit from them. This, however, is a small matter, as they can afford to give something toward the education of the poor, and also to pay for the education of their own children elsewhere. It is otherwise with the citizen in middling circumstances. If a public school be badly taught, and he is sensible of the value of a good education, he also will send his children to a private school. To him this double expense, especially if his family be large, is a serious inconvenience; he is taxed to support schools of which he will not avail himself, and, in addition, pays as much for the education of his children as though he had contributed nothing. It must be evident that the true interest of every citizen of moderate circumstances must be so to elevate the character of our public schools, that he need look no where else for as good instruction as his family may require. Although, to accomplish this, he pays a somewhat heavier tax for public education, he will, in the end, be greatly the gainer.

Here, however, we are aware that another consideration will occur. It may be said, that in the distribution of funds raised for public schools, perfect equity is not to be looked for nor desired,—that this is a contribution from the rich for the benefit of the poor, and that they are sufficiently rewarded by the improved moral and intellectual condition of the poorer classes of the community. Now, granting all this to be so, we must remark that the spirit of the suggestion seems to us at variance with our republican institutions. It in reality belongs to the old world more than to the new. Why create such distinction between our fellow-citizens? Why should one class of society be supposed to say to another, it is for our interest that you should have education, and we give it to you, but it shall be as useless as any thing which can bear the name,—so useless that for ourselves and our families we will have nothing to do with it? We hope no man amongst us would be willing to harbor such a thought, or utter such a sentiment.

But, as we said before, granting all this to be true, and that perfect equity in the distribution can not be effected, as clearly it can not, what then? Is not education a commodity which all classes of the community want? Why, then, should we not furnish it of such quality that all may enjoy it together? By furnishing a valuable course of public instruction, the rich will enjoy its advantages, and surely it can not injure the middling classes and poor. Nor do we here look towards an impracticable result. Children of every class are seen in the public schools in Boston, and they are found there because, as in several instances, wealthy parents told your committee the public were preferable to the private schools.

And here we may remark, that there can be no doubt of the effect of a single school of the highest character upon the discipline and improvement of all the others. Entrance to it would be conferred, as the reward of merit, upon the most deserving scholars of each grammar school, and its requirements should always be an accurate knowledge of the branches taught in these schools. It is needless to suggest that a thorough education in such a school as we propose would be the most valuable reward which could be conferred upon diligence and good conduct. Of its value, both to the community and the scholar, we need mention only one fact. The regular course in the High School in Boston occupies three years. Sixty or eighty boys enter it annually. But such is the demand for clerks from this school, though in such a city there are always abundant applications for such situations, that in no case did a greater number than eight or ten in a year complete the whole course.

If, then, we are not mistaken in these views, it is evident that public instruction should be provided in sufficient extent to meet the wants of the community. The course should embrace a series of instruction, from the simplest elements to the higher branches of knowledge, and the instruction in every department should be of the most valuable character.

Though we may grant to all who labored to improve these schools every thing that may be due, and the number of such persons is not small, it can be said without disparagement to any of these, that the influence of President Wayland in working out the plan, and stimulating the community to adopt and sustain it, was second to that of no other person.

In a "*Discourse at the opening of the Providence Athenæum, July* 11, 1838," Dr. Wayland developes the object which the founders of this class of institutions should have in view—viz.: "to provide the means for the universal diffusion of knowledge in its most extensive signification."

They have determined that this library shall be a repository for the standard English works, in every *science*, with which an intelligent community would desire to become acquainted. They believe that such an institution should contain the intellectual aliment, by which the genius of a Davy, an Arkwright, a Franklin, a Rittenhouse, or a Bowditch, might be nourished. God has scattered the seeds of pre-eminent ability as profusely among the poor as among the rich. When such gifts perish, through the want of cultivation, the loss is suffered by mankind. It becomes us, then, as philanthropists and as citizens, to provide for the whole community the means of cultivating, in the most perfect manner, the whole of that talent with which the Creator has enriched it.

Having thus provided the means for attaining a knowledge of the *laws* of the universe, their next endeavor will be to collect the *facts* which its history has unfolded. It is their design here to provide the student with the means of investigating the *history* of man, as he is seen in every stage of his transition from barbarism to civilization, under all the diversified influences of climate and situation, of political and religious institutions, of poverty and wealth, of prosperity and decline. But *history* would be imperfectly understood, without a knowledge of *biography*. Hence it is their intention to furnish the reader with a collection of the lives of those, who, in any age have distinguished themselves either by profoundness of knowledge, brilliancy of achievement, or splendor of discovery. They mean that we should here have the opportunity of holding communion with the warriors and statesmen, the philosophers and scholars, the poets and orators, the civilians and divines, who have made their names illustrious by the changes which they have wrought in the current of human thought, or feeling or action. We may thus be enabled to trace the most stupendous effects to their elementary causes, and to behold what responsibility God has conferred upon genius; and to observe how signally it is in the power of individual man to bequeath happiness or misery to the entire race of which he forms a part.

But the facts which respect man alone, form but a small part of that knowledge which it becomes us to acquire. Our globe itself has been subjected to accurate observation, and the changes through which it has passed, during the long period of its existence, have been traced with scarcely less than philosophical accuracy. The *vegetable* productions which cover it have been examined and classified, their characters described, their uses ascertained, and their modes of cultivation carefully illustrated. The *animal* kingdom in all its varieties, whether inhabiting the air, the water, or the land, has, from the time of Aristotle, attracted the attention of the naturalist, until now, at last, by the labors of Cuvier, its whole extent has been brought within the view of the philosopher. Of the utility or of the attractiveness of these studies, it is superfluous here to speak. I surely need not tell you, how greatly the knowledge which they unfold conduces to the development of national resources; nor how admirably calculated are the classifications to which they are subjected, to discipline and invigorate the human understanding. Aware of this, it is the intention of the Directors of the Athenæum to enrich their collection, as far as it may be in their power, with works on natural science.

But the laws of nature, and the facts which have transpired, and the beings which *actually* exist, are far from being all that is comprehended within the domain of human knowledge. The wonder-working power of the imagination, has created forms of awful grandeur and of surpassing loveliness. By the contemplation of these, the love of the beautiful is cultivated, the taste is refined, and the social sympathies are purified and ennobled. Hence, it is the intention of the Directors of this institution, to render it rich in every thing, whether in prose or verse, whether in didactic literature or the literature of fiction, with which genius has ennobled our mother tongue.

Admittance to its privileges is designedly rendered so easy, that, for all practical purposes, it may, in effect be declared free. It is, moreover, the design of the proprietors that it should be useful *to all*. While they look at the treasures of human thought, *in general*, they do not forget that they are collecting books for men, *in particular*. Hence, they wisely adjust the general principles of their selection to the case of the community in whose behalf they act. They intend that there shall be no occupation, whether professional or industrial, which shall

not here find the means both of instruction and relaxation. They mean here to open a fountain of living water, at which the intellectual thirst of this whole community may be slaked.

We have arrived at a crisis in the progress of civilization, such as, I believe, has rarely, if ever, been witnessed. Those nations of modern times, which have felt the impulse of the Reformation, have directed all their efforts to the simple object of widely disseminating the elements of an education. Their highest aim has been to see that "the schoolmaster be abroad," and thus to enable every citizen to read in his mother tongue. But in New England, all this has long since been accomplished. The schoolmaster here has always been *at home*. There is scarcely a native born man, or woman, or child among us, who is not able to read, and write, and keep accounts. The book of the English language, with whatever it contains of life or of death, and whatever of these it may hereafter contain, is spread open before the whole community.

If we desire to reap the benefit of all our previous exertions, it must be done by carrying out the plan which the proprietors of the Athenæum have adopted. We must render knowledge, valuable knowledge, accessible to the whole community. We must collect the treasures of science and literature, and throw them open to all who are disposed to avail themselves of their benefits. We must provide the means by which the light of intellect shall shine into every house, and pour its reviving beams into the bosom of every family. And still more, we must act for the future. In our present state, no great object can be accomplished, unless we act for posterity. We must, therefore, lay the foundations of this institution in such principles, that it will grow with the growth of intelligence, widening and deepening the channels of its influence, as it passes on from age to age, more and more thoroughly imbuing every successive race with admiration of all that is great, with love for all that is beautiful, and with reverence for all that is holy.

In the diversified plans and agencies by which the Commissioner of Public Schools (Henry Barnard) labored from 1843 to 1849, to interest parents, teachers, and school officers in the great work of organizing an efficient system of public instruction for Rhode Island, Dr. Wayland gave his valuable counsel and co-operation. He was as ready to assist in a meeting of the Rhode Island Institute of Instruction at Kingston, or at the dedication of a school-house at Chepatchet or Pawtucket,* as to address the American Institute at Boston, or assist in the celebration of the founding of a College or a Theological Seminary.

Nor did he confine his interest in education to Rhode Island. Education in its best sense he regarded as cosmopolitan, and attaching itself to every public and private interest.

When the subject of supplying ministers for the vacant churches of his own denomination was up for discussion, Dr. Wayland applied himself to ascertaining the facts of the case, and then applying the remedy.

* Address at the Dedication of the Public School-house in Pawtucket. Journal of R. I. Institute of Instruction, Vol. II., pp. 253-8.

Since the year 1820, we [the Baptists] have established ten theological seminaries.* These, in the year 1852, contained 105 students, and 24 professors. Supposing the course of study in each to be three years, the annual supply from this source would be exactly thirty-five. If we deduct from this number those who are needed for foreign missions, those who become professors, teachers, editors, and agents—what is left for the supply of the ministry at home? Our annual demand for the supply of the ministry we have estimated at about 600. From our seminaries we may expect, at most, twenty-five or thirty, or about one to each professor. The seminary at Newton, Mass., is better endowed than any other which we have established. It possesses spacious grounds and extensive buildings, a fund of $100,000 was lately raised for its support, and it besides receives large aid from the Education Society. Its number of graduates up to 1852 is set down at 201. It had been in existence then twenty-seven years. Its average number of graduates per annum has been about seven and a half, or not quite two to a professor. The whole number of those who had studied there, whether pursuing the complete course or not, is 300. The annual average of these is a fraction over eleven. These facts are sufficient to exhibit the amount of supply which the ministry may expect from this source.

In twenty-two colleges, [under Baptist auspices,] in the year 1852, there were preparing for the Baptist ministry, 312. Supposing a college course to be four years, the annual supply from this source would be 78. It is well known, however, that a considerable proportion of those preparing for the ministry in college never enter it. On the other hand, a considerable number of Baptist students are found in other than Baptist colleges. It is, however, to be observed, that almost all who at present attend our theological seminaries are graduates of colleges. We can not, therefore, in estimating our supply, add the students at college to those at the seminaries. It is difficult to determine the number of candidates for the ministry, who annually come from our colleges and theological seminaries. Probably they do not exceed ninety or one hundred, and from this number must be deducted those who become professors, teachers, editors, agents, foreign missionaries, and those who relinquish their intention of entering the ministry. Making the most liberal calculation, it is manifestly absurd to rely upon any such means as these to supply our annual demand. Our present condition may be in a great measure owing to a too great reliance upon these sources for the supply of our necessities.

Without denying the utility of Theological Seminaries, or the benefits of a full course of Academic and College preparation, Dr. Wayland advocates a modification of the courses and studies in both, to meet the existing wants of a class of candidates who come to the work of the ministry late in life and with an imperfect school training, but with vigor of constitution and the habit of overcoming difficulties, and therefore prepared to profit by special instruction calculated to make them good and effective preachers.†

We can not finish this sketch without adverting to the genial appreciation with which he welcomed and acknowledged the labors of others.

* American Baptist Register, 1852.

† Notes on the Principles and Practices of Baptist Churches. 1857.

It was a touching and impressive scene which was presented at the 50th anniversary of Dr. Nott, as President of Union College, when the pupil now crowned with the snows of age, seemed again to take his place at the feet of his yet more venerable teacher, and at the close of his public discourse, spoke thus:

An aged man, the Nestor of American teachers, finds himself this day surrounded by pupils who have assembled from every State in our Union, to offer him their filial congratulations. An Officer of instruction, who has for half a century presided over a most flourishing seat of learning, is here met by the thousands who have returned to the home of their education, to declare that whatever of success they have achieved in their several professions, has been greatly owing to the wisdom of his precepts and the purity of his example. He who, while discharging with unrivalled ability the duties of the lecture-room, and watching with parental solicitude over the individual development of every pupil committed to his charge, has yet found time, by masterly skill, to accumulate a fund which must render Union College the most favored institution in our country, has this year completed his labor, and has laid this magnificent offering on the altar of public education. While for fifty years distributing gratuitous instruction with profuse liberality, he has been also providing the means for a wider and richer distribution of its blessings for all coming time. A benignant Providence has spared that honored life, and crowned those labors with triumphant success; and now a whole community, uttering the voice of humanity, has assembled to bow in grateful reverence before that hoary head which, for half a century, has been encircled with the wreath of profound learning, matchless sagacity, unwearied benevolence, surpassing eloquence, and childlike piety. The youth and the age of the present seem here to unite with the coming generations of the future, and shower on the head of that "old man eloquent" their selectest benedictions.

Venerable man! We rejoice to see that thine eye is not dim, though thy natural force is somewhat abated. We thank you for your care over our youth; we thank you for those counsels which have so often guided our manhood; we thank you for that example which has ever so clearly pointed out to us the path of earnest duty and self-forgetful charity. Long may you yet live to witness the happiness which you have created, and cherish the genius which your inspirations first awakened to conscious existence. And when the Saviour, in whose footsteps you have trodden, shall call thee home to receive thy reward, may death lay his hand gently on that venerated form, and gently quiet the pulsations of that noble heart. May thy fainting head recline upon the bosom of the Redeemer whom thou hast loved; may thine eye open upon visions of glory which man may not utter; and so may an entrance be abundantly administered to thee into the joy of thy Lord. Heaven will account itself richer, as it opens its pearly gates to welcome thy approach; but where shall those who survive find any thing left on earth that resembles thee?

In the spirit of a grateful and reverent pupil, Dr. Wayland, was also present at the semi-centennial celebration of the founding of the Andover Theological Seminary, and being called on, paid a

tribute to Professor Stuart, his beloved teacher and friend, from which the following extracts are made.

It has been my good fortune, during the latter part of my student-life, to enjoy the instructions of two very eminent men. One yet lives, and, at the age of nearly fourscore and ten, with his eye not dim, though his bodily force is abated, still presides over the institution of which for more than half a century he has been the most distinguished ornament. Clarum et venerabile nomen! Long may he live to adorn and bless humanity, and temper the brilliancy of eminent ability, with the mild lustre of every Christian virtue.

The other was Moses Stuart, whose name for so many years was a tower of strength in this Institution. If I do not misjudge, he was one of the most remarkable teachers of his age. His acquaintance with his subject in the class-room was comprehensive and minute. There was no sacrifice in his power which he did not rejoice to make, if by it he could promote the progress of his pupils. It seemed as if all that he asked of us was, that we should aid him in his efforts to confer upon us the greatest amount of benefit. He allowed and encouraged the largest freedom of inquiry in the recitation room, and was never impatient of any questioning if the object of it was either to elicit truth or detect error. The spirit which animated his class was that of a company of well educated young men, earnestly engaged in ascertaining the meaning of the word of God, under the guidance of one who had made every sentence and every word in the original languages the object of special and successful study.

This alone would have been sufficient to place Moses Stuart in the first class of instructors. But to this he added a power of arousing enthusiasm such as I have never elsewhere seen. The burning earnestness of his own spirit kindled to a flame everything that came into contact with it. We saw the exultation which brightened his eye and irradiated his whole countenance, if he had discovered some new use of Vaf conversive which threw light upon a phrase of the Old Testament, or, if by some law of the Greek article a saying of Jesus could be rendered more definite and precise, and we all shared in his joy. We caught his spirit, and felt that life was valuable for little else than to explain to men the teachings of the well beloved Son of God. If any one of us had barely possessed the means sufficient to buy a coat, or to buy a lexicon, I do not believe that a man of us would for a moment have hesitated. The old coat would have been called upon for another year's service, and the student would have gloried over his Schleusner, as one that findeth great spoil. It seemed as though, in his class-room, we became acquainted with all the learned and good of the past and the present; we entered into and we shared their labors; we were co-workers with them and with our teacher, who was the medium of intercourse between us and them. We hung upon his lips in the class-room. We coveted his sayings in his walks or at the fire-side, and any one of us was rich for a week, who could report his *obiter dicta*, ever replete with wit, learning, and generous, soul-stirring enthusiasm.

With all this love of inquiry, his discipline in the recitation room was strict and exacting. He expected every man to be like himself, *totus in illis*, and his expectation was rarely disappointed. His reverence for the word of God was deep and all-pervading. I remember but one instance under his teaching of what seemed to be a trifling with the word of God. The offender, who was

odd, opinionated, and constitutionally wanting in reverence, had read an essay which seemed intended to create a laugh. The rebuke which he received was such that we all quailed in our seats. I fancy that many years elapsed before such an experiment was attempted in his lecture-room again. I do not know that I can better illustrate the effect of his teaching upon his pupils, than by stating my own experience in a single particular. My acquaintance with Professor Stuart continued until his death. He always treated me with particular kindness, and was frequently a guest at my house. He invariably addressed me, after my settlement in the ministry, as "brother." I, however, could never reciprocate it. I could no more have called him brother than I could have thus addressed my own venerated father.

If now we turn for a few moments to the services of Professor Stuart, we must, first of all, remember the circumstances under which his career commenced. It was at a time when the question was contemptuously asked, "Who reads an American book?" Hardly an American author had ever been republished in Europe. There were among us very few scholars, and there was here none of the apparatus by which scholarship is made. There was not an institution in the United States that possessed what could be properly termed a respectable library. He went forth alone to his great work, with the sentiment of Bacon in his heart, *aut viam inveniam, aut faciam.* He made his own grammars. He published his own Chrestomathy; he gave to the world commentaries of which any country may be proud, while his contributions to sacred literature in separate treatises and in periodicals would almost make a library of themselves.

To this let us add the impression which he produced on his classes. For nearly forty years a company of young men annually left this Institution, imbued with his spirit, zealous in the pursuit of all good learning, and especially of biblical science, and they were dispersed over every State in the Union. Of these a large portion have attained the highest eminence in the studies to which he introduced them. Sir Humphrey Davy, when complimented on his discoveries, replied, that the greatest discovery he had ever made, was that of the genius of Michael Faraday. So Moses Stuart, by generously fostering eminent talent in his own department, has raised up for the church some of its brightest ornaments, and has given to biblical learning a place in this country second to none in the Anglo-Saxon nation. Great Britain, at the present day, can, I think, show nothing that can compare with the Seminary at Andover, and the scholars whom Andover has nourished. It is said, I know, by way of depreciating the merits of Professor Stuart, that in their several departments many of his pupils have surpassed him in depth of scholarship and accuracy of research. Be it so; but who taught them to surpass him? Be it so, but who marked out the road, and leveled the forest, and established the grade, and laid the rails, on which we now travel so easily? What does it detract from the glory of Columbus, that it took him sixty or seventy days to cross the Atlantic, which we cross in ten? If he had not shown us the way, we should never have crossed it at all.

If, then, we would estimate the labors of Moses Stuart, labors performed amidst sickness, and pain, and weariness, and sleeplessness, we must begin by spreading before us his grammars, commentaries, and various works on hermeneutics, in Greek and Hebrew, with its cognate languages. Upon them we will place the love of the original study of the Bible, which he diffused over the

ministry of every denomination in this country. Upon this we will place his influence upon the establishment of Theological Seminaries. Upon this we will place the aid which he has rendered to those who have translated the oracles of God into the languages of the heathen. Upon this we will place the progress in classical learning which has been inaugurated under his auspices. And having thus raised our monument, we will encircle it with a wreath, on which shall be inscribed the names of those eminent biblical scholars, the living and the dead, who have placed themselves, *primi inter pares*, among the biblical scholars of the world, and who owe their first and best impulses to the example and encouragement of our master. Having done this, I will ask you, and all of you, to say who of the present age has raised for himself a prouder, a more glorious, a more perennial monument. And when the history of biblical learning in this country shall be written, and the names of those who have done worthily shall shine in letters of light, who can doubt that the first place on that roll will, by universal consent, be inscribed with the name of MOSES STUART?

In the same spirit of generous appreciation is his eulogy on the life and sciences of Professor Goddard, of Brown University, of which the following paragraphs will serve as specimens.

I rise, this afternoon, to perform one of the saddest duties to which I have ever been appointed. My colleagues have requested me to deliver a discourse, in commemoration of the life and services of one very dear to us all, but, if I may be allowed to say it, specially dear to me. He was the first officer of this institution with whom I had the honor to become intimately acquainted. Our friendship has continued, without interruption, from its commencement until the day of his death. During the whole period, within which we were associated as officers of instruction, we were in the habit of meeting daily, and many times in the day. The various plans, which, since my knowledge of this institution, have been laid, for the improvement either of its course of education or manner of discipline, have all received the benefit of his wise and thoughtful consideration. The principles on which they depended were developed by mature reflection, and the measures which resulted from them were carried into effect by our mutual labor. And when, in consequence of ill health, he retired from the duties of that chair which he had filled with equal honor to himself and advantage to the University, we all considered his separation from us to be rather in form than in fact. We unanimously invited him to be present at all the meetings of the faculty, assured that his interest remained unabated in the prosperity of the institution, on whose reputation his labors had conferred so much additional lustre. We felt that his talents, and labor and fame, were as much as ever the property of the University. For myself, I may truly say, that, for nearly twenty years, I have taken but few important steps, the reasons for which I have not discussed in the freest manner with him, and in which, also, I have not been in a great degree either guided by his counsel or encouraged by his approbation. There is scarcely a topic in religion or morals, in literature or social law, on which either of us has reflected, that we have not discussed together. Neither of us was fond of disputation, but both of us loved exceedingly the honest and unstudied interchange of opinions. It so happened, that our views upon most of these subjects were, in an unusual degree, identical. The

very last conversation in which we were engaged related to those great truths revealed to us by Jesus Christ, in the belief and love of which all his spiritual disciples are one. A few days previously, I had requested his advice upon a matter of some importance to myself, some of the facts in connection with which I then submitted to him, while the farther consideration of them we deferred to another occasion.

If I have correctly estimated the character of Mr. Goddard, its most remarkable feature was delicate and discriminating sensibility. I have already remarked that he possessed neither taste for the mathematics nor aptitude for tracing the relations which they discover. This observation might with truth be more widely extended. He had no fondness for abstruse reasoning of any kind; and I presume rarely followed the successive steps of an intricate metaphysical argument to its conclusion. But it was equally true, that by a sort of instinctive sensibility, he seemed to arrive at precisely the same result which minds differently endowed apprehended only by the slower process of ratiocination. His critical perceptions were more exquisitely delicate than those of any man whom I have ever known. His friends never ceased to admire his unsurpassed power of discerning the most microscopic want of adjustment between a thought and the language in which it was clothed. He saw intuitively the precise form which an idea should assume, in any portion of a discourse, and the very tinge and junction of words which would most clearly and happily develop it. He frequently could not give the reason for his choice of an expression, and he might sometimes ask the reason of others; but the reason always existed, and bore testimony to the accuracy of his judgment. Hence the study of the science of rhetoric produced but little effect upon his style. It seemed not to teach him to write, in any respect, either with greater accuracy or elegance, but only to give him firmer confidence in the decisions of his own sensibility. He learned from the study of rules to write with less anxiety, and to correct with greater rapidity, inasmuch as he thus *knew* that he was right, when before he had only *felt* it.

The same spirit of warm-hearted friendship and generous appreciation of his valuable services as Treasurer of the University, and of his high character as an educated merchant, mark the discourse delivered on the death of Moses B. Ives. So too, in his Review of the Progress of Popular Education in his Discourse at the 25th Annual Meeting of the American Institute of Instruction in 1854, he seemed to take pleasure in making honorable mention of those who have labored faithfully in any department of the educational field. After dwelling on the improvements in the organization, gradation, supervision, and instruction of schools, Dr Wayland remarks:

Another fact deserves here to be mentioned, and I refer to it with peculiar pleasure. The character of our school-houses has also been greatly improved. Not long since, they were a reproach to our community, and a striking illustration of the forgetfulness of even parental affection. Children whose homes were in every respect comfortable, were huddled together in small school-rooms, horribly cold in winter, and almost suffocating in summer, provided with seats

and desks apparently constructed for the purpose of creating intense weariness, and inflicting no contemtible amount of pain. Our stables indicated more attention to the wants of our cattle, than our school-houses to the comfort of our children. Who of us, in middle life, can remember without a shudder the sufferings of a school-room in winter. A delightful change has come over us in this respect. Architectural talent is now employed in the erection of school-houses, which are ornaments to their vicinity, whether in town or country; and a knowledge of the laws of health has rendered them commodious, well ventilated, and healthful. The foul, prison-like smell which once distinguished the school-room has disappeared, and our children, in airy rooms, with convenient seats, and in well tempered atmosphere, find interest and enjoyment where they formerly experienced nothing but nervous prostration, weariness, and intense discomfort. This change, it is proper to remark, is to be ascribed more to the labors of Henry Barnard, late Superintendent of Common Schools in Connecticut, than to any other cause. This gentleman has devoted his remarkable abilities, for many years to the improvement of Common School Education, and the result of his labors may be discovered in almost every town in Connecticut and Rhode Island.

Another important feature in the improvement of our common school system may be observed in the appointment of Superintendents. I believe that Providence was the first city in New England, in which the office of Superintendent was permanently established. To John L. Hughes, Esq., more than any other individual, are we indebted for the admirable system of public schools which we now enjoy. Nathan Bishop, Esq., now Superintendent of Schools in the city of Boston, was our first Superintendent, and under his direction our present organization received its form and pressure.

In a review of Stanley's "Life and Correspondence of Thomas Arnold," in the North American Review for October 1844, Dr. Wayland exhibits his genial appreciation of the labors of that great teacher and educator.

When he went to Laleham, he adopted education as his profession for life. This determination effected a great change in his character. It turned all his energies in one direction. It brought upon him definite, entellectual, and moral responsibilities, which he strengthened himself to the utmost to sustain. He took large and very grave views of the field of duty upon which he had entered, and he resolved to occupy it without shrinking. He devoted himself without stint to the intellectual cultivation of his pupils. He sought to improve in the highest degree every one committed to his charge. Hence, he was employed with great industry in enlarging his own intellectual resources. But, above all, he deemed it his duty to prepare his pupils for heaven. He felt that he must teach them by example as well as precept, if he desired his instructions to have any salutary effect. Hence, all his moral powers received fresh energy from the circumstances in which he was placed. He was always setting before his boys the highest motives of Christian conduct; and these motives had the more commanding efficacy from the fact, that their instructor was himself striving to be the exemplar of all that he inculcated.

Dr. Arnold commenced his labors at Rugby with the fixed determination to carry fully into practice the opinions which he had formed. He had a clear

conception of the object for which the classics should be studied. It was not that learning the forms of nouns and verbs strengthens the memory, nor that the attention to minute differences sharpens acuteness; nor that our language is in part derived from the Latin and Greek, and that through them we may learn more accurately the meaning of the words of our mother tongue. He had a different and far higher notion of the office of a classical teacher. He looked upon the best ages of Greece and Rome as periods of civilization strikingly analogous to our own, and as periods in which the intellectual and æsthetic elements of the human mind had attained their most perfect development. More than this, a grand series of experiments was then made upon government in all its various forms, and the results have been handed down to us by some of the profoundest thinkers who have ever lived. He believed that we can study these events, and arrive at the knowledge which they proffer, better than would be possible, were the transactions of recent occurrence; because in the study of the ancients, we are unbiased by the prejudices arising from our political partialities. Hence, his object, in teaching the classics, was to render the student familiar with the works of the human intellect in the most perfect state of development which it has ever attained.

The great point at which he aimed was to call out and exercise all the powers of the pupil. He sought to impart the most valuable knowledge; but he sought to do it in such a way that the boy should, with every lesson, learn better than before both how to acquire knowledge for himself, and how to use it after it had been acquired. "'You come here,' said he 'not to read, but *to learn how to read;*' and thus the greater part of his instructions were interwoven with the processes of their own minds, there was a continual reference to their own thoughts, an acknowledgment, that, so far as their reading and power of reasoning could take them, they ought to have an opinion of their own." Thus the pupil became every day more and more accustomed to bear the weight of original thinking, and to combine the maturity of manhood with the vivacity and vigor of youth.

But while he was thus improving the study of the classics, he did not confine his efforts simply to them. He introduced the teaching of the French and German languages into the regular course of school instruction. His studies had led him to explore the wide field of Continental literature. He venerated without measure the profound and universal scholarship of Neibuhr and of the Chevalier Bunsen; and he desired to awaken in his pupils, if not an emulation of such examples, at least a scholarlike admiration of their vast achievements. He was fully aware, that no man could pretend to large and vigorous classical erudition, who had not availed himself of the researches of those modern scholars who have thrown such a flood of light upon almost every point of philological and historical inquiry. Hence, he ingrafted these studies upon the former system.

To the study of history, both ancient and modern, he attached great importance. The great study, at present, of every thoughtful man, is the social improvement of the human race. The great problem to be solved is, how may men be governed so as to escape the dangers both of anarchy and despotism? At no time has this subject been so earnestly pressed upon the consideration of every man in the civilized world as at present, and at no time have men been so much disposed to attempt every variety of reckless political experiment. Dr. Arnold was a firm believer in the unceasing progress of humanity. He

abhored those notions that would keep men always as they are, both because they seemed to him treason against our common nature, and to lead, of neeessity, to revolution and anarchy. But he desired, that every attempt at improvement should be made with a profound consideration of all the experienee of the past. He believed, that the principles at present in operation have been in operation from the beginning; and consequently, that, by a use of the knowledge of the past, we may save ourselves from innumerable blunders and incalculable mischief. He intended, therefore, so to teach history, as to render it the means of communieating, not merely faets, but the *rationale* of the faets; guiding the pupil to a knowledge of the principles of human eonduct, of political rights, of moral philosophy as applied to society, and thus, in a word, to genuine, high-minded statesmanship.

Every one must be aware of the immense effect that must have been produced upon his pupils by a training of this kind. They would go forth, even in youth, rieh in knowledge, and strong in the power to use that knowledge; wise far beyond their age, and in consequence of that wisdom, humble and modest. It is, moreover, evident, that no one but a man of high talent eould carry out such a system of edueation, and also, that nothing would so finish and perfect his talent as the very act of thus carrying it out. Dull, formal instruction dwarfs the mind of teacher and pupil; vigorous and manly instruction expands the faculties of both in almost equal measure. It was this very exercise of mind, daily ealling all his energies into aetive employment, that rendered him capable of performing those other works, which would have seemed sufficient for the exclusive labor of even an able man.

The question ean not but arise to every man among us,—shall we ever have such schools as this in our country? We are obliged to answer,—with our present opinions and practice, never. An edueation such as we have been considering, requires sufficient time allotted to the pupil, and sufficient ability to accomplish it in the instructor. Our system deliberately excludes both conditions. The *beau ideal* of our system is to render the course of edueation as cheap and as short as possible. We have succeeded in our attempt. We have made it very cheap, and such as may be acquired in a very short time; but after all, it is worth no more than we give for it.

The truth is, that a liberal education is neeessarily an expensive aceomplishment. It requires high talent to conduct it: and high talent can be commanded only by suitable remuneration. It requires many years of exelusive study on the part of the pupil,—of study so exelusive that he can profitably employ this time in no other occupation. With adequate iustruetors, under a proper system of stimulants and encouragement, and with sufficient time given to their work, we should make as good scholars as any people on earth. But we proceed on prineiples precisely the reverse. In the first place, we aet upon the belief, that the most perfeet system of elassical edueation is that which will enable a young man, commencing his studies without a dollar in his pocket, and laboring in vaeations, or by the receipt of scanty eleemosynary assistanee, to proceed Bachelor of Arts without ever finding himself in debt. Hence, we reduce the salaries of teachers very far below those of any other professional men, and make these salaries in no manner dependent upon the success or ability of the instruetor. We make the requisitions for admission to eollege such as to meet the circumstanees of those who can not afford to spend more than a year, or a

year and a half, in preparation. We crowd every sort of knowledge into the compass of four years, because we wish our youth to know everything; we then shorten the period of study by useless vacations, so that the indigent may be better able to support themselves; and then blame our schools and colleges, because they produce so little effect upon the intellectual character of their pupils.

It will of course be asked,—are you, then, proposing to exclude the poor from the blessings of a liberal education? We answer,— we propose to exclude nobody; we are merely setting forth the reason why our course of liberal education is no better. Without regard to rich or poor, we would seek to make the education good. If a man of talents and good character be poor, it is a public service to assist him in becoming more useful to the community. If a man have not talent, it is commonly a misfortune to him and to the community to place him in a profession. But in neither case can any reason be found for accommodating the whole system of public education throughout the land to meet his pecuniary ability. There are many persons in every community, who can afford to pay but one-third of the ordinary price for a wheaten loaf. Would it be wise or just to reduce the wages of bakers to meet this exigency, to make bread of course flour, and, in order to economize still more, allow it to be only half-baked, and then enact, that no other bread but that produced in this manner should be eaten?

We have left no space, if we had the inclination, to present an estimate of Dr. Wayland's labors as an educator. The statement of facts which in the beginning we proposed, has furnished to every reader an opportunity to judge for himself of the value of those labors, and of the ability and spirit and success of the man. Probably no man living places a lower estimate on the services to the world, of this venerable teacher, than he himself. We regret that the thought has ever occurred to him that he might have served his generation and his Divine Master with greater acceptance in another sphere. For all the qualities which he possesses in an eminent degree—such as a natural horror of trick and quackery, and a soul full of honor, quick sympathies with the afflicted and oppressed, a companionable nature, and fervent piety, have tended to give him special power and success as an educator. And we can not forbear to add that his endowments as a thinker and writer, his patience and persistency in following up any plan, the singular concentration with which he can gather all his faculties for the work he has to do, and his capacity for detail and administration would have secured distinction in any career. If he had chosen, he might have stood among the most conspicuous of his country's statesmen or merchant princes. As it is, he ranks among the most remarkable teachers and writers of our time.

X. INTELLECTUAL EDUCATION—ITS OBJECTS AND METHODS.

INTRODUCTORY DISCOURSE BEFORE THE AMERICAN INSTITUTE OF INSTRUCTION AT BOSTON, MASS, IN AUGUST, 1830.

BY FRANCIS WAYLAND, PRESIDENT OF BROWN UNIVERSITY.

In the long train of her joyous anniversaries, New England has yet beheld no one more illustrious than this. We have assembled to-day, not to proclaim how well our fathers have done, but to inquire how we may enable their sons to do better. We meet, not for the purposes of empty pageant, nor yet of national rejoicing; but to deliberate upon the most successful means for cultivating, to its highest perfection, that invaluable amount of intellect, which Divine Providence has committed to our hands. We have come up here to the city of the Pilgrims, to ask how we may render their children most worthy of their ancestors and most pleasing to their God. We meet to give to each other the right hand of fellowship in carrying forward this all-important work, and here to leave our professional pledge, that, if the succeeding generation do not act worthily, the guilt shall not rest upon those who are now the Instructors of New England.

Well am I aware that the occasion is worthy of the choicest effort of the highest talent in the land. Sincerely do I wish, that upon such talent the duty of addressing you this day had devolved. Much do I regret that sudden indisposition has deprived me of the time which had been set apart to meet the demands of the present occasion, and that I am only able to offer for your consideration such reflections as have been snatched from the most contracted leisure, and gleaned amid the hurried hours of languid convalescence. But I bring, as an offering to the cause of Education, a mind deeply penetrated with a conviction of its surpassing importance, and enthusiastically ardent in anticipating the glory of its ultimate results. I know, then, that I may liberally presume upon your candor, while I rise to address those, to very many of whom it were far more beseeming that I quietly and humbly listened.

The subject which I have chosen for our mutual improvement, is, *The object of intellectual education; and the manner in which that object is to be attained.*

I. It hath pleased Almighty God to place us under a constitution

of universal law. By this we mean, that nothing, either in the physical, intellectual, or moral world, is in any proper sense contingent. Every event is preceded by its regular antecedents, and followed by its regular consequents; and hence is formed that endless chain of cause and effect which binds together the innumerable changes which are taking place everywhere around us.

When we speak of this system as subjected to universal law, we mean all this; but this is not all that we mean. The term law, in a higher sense, is applied to beings endowed with conscience and will, and then there is attached to it the idea of rewards and punishments. It is then used to signify a constitution so arranged, that one course of action shall be inevitably productive of happiness, and another course shall be as inevitably productive of misery. Now, in this higher sense is it strictly and universally true, that we are placed under a constitution of law. Every action which we perform, is as truly amenable as inert matter, to the great principles of the government of the universe, and every action is chained to the consequences which the Creator has affixed to it, as unalterably as any sequence of cause and effect in physics. And thus, with equal eloquence and truth, the venerable Hooker has said, "Of Law, there can be no less acknowledged, than that her seat is the bosom of God, her voice the harmony of the world; all things in heaven and earth do her homage, the very least as feeling her care, and the very greatest as not exempted from her power; both angels and men and creatures of what condition soever, though each in different sort and manner, yet all with uniform consent, admiring her as the mother of their peace and joy."

Such a constitution having been established by a perfectly wise Creator, it may be easily supposed that it will remain unchangeable. His laws will not be altered for our convenience. We may obey them or disobey them, we may see them or not see them, we may be wise or unwise, but they will be rigidly and unalterably enforced. Thus must it ever be, until we have the power to resist the strength of omnipotence.

Again; it is sufficiently evident that the very constitution which God has established, is, with infinite wisdom and benevolence, devised for just such a being, physical, intellectual, and moral, as man. By obedience to the laws of God, man may be as happy as his present state will allow. Misery is always the result of a violation of some of the laws which the Creator has established. Hence, our great business here, is, *to know and obey the laws of our Creator.*

That part of man by which we know, and, in the most important sense, obey the laws of the Creator, is called MIND. I use the word

in its general sense, to signify, not merely a substance, not matter, capable of intellection, but one also capable of willing, and to which is attached the responsibility of right and wrong in human action. And, still further, it is one of the laws of mind, that increased power for the acquisition of knowledge, and a more universal disposition to obedience, may be the result of the action of one mind upon another, or, of the well-directed efforts of the individual mind itself.

Without some knowledge of the laws of nature, it is evident that man would immediately perish. But it is possible for him to have only so much knowledge of them as will barely keep generation after generation in existence, without either adding anything to the stock of intellectual acquisition, or subjecting to his use any of the various agents which a bountiful Providence has everywhere scattered around, for the supply of his wants and the relief of his necessities. Such was the case with the Aborigines of our country, and such had it been for centuries. Such, also, with but very few and insignificant exceptions, is the case in Mohammedan and Pagan countries. The sources of their happiness are few and intermitting—those of their misery multiplied and perpetual.

Looking upon such nations as these, we should involuntarily exclaim, What a waste of being, what a loss of happiness, do we behold! Here are intelligent creatures, placed under a constitution devised by Infinite Wisdom to promote their happiness. The very penalties which they suffer, are so many proofs of the divine goodness—mere monitions to direct them in the paths of obedience. And besides this, they are endowed with a mind perfectly formed to investigate and discover these laws, and to derive its highest pleasure from obeying them. Yet that mind, from want of culture, has become useless. It achieves no conquests. It removes no infelicities. Here, then, must the remedy be applied. This immaterial part must be excited to exertion, and must be trained to obedience. Just so soon as this process is commenced, a nation begins to emerge from the savage, and enter upon the civilized state. Just in proportion to the freedom and the energy with which the powers of the mind are developed, and the philosophical humility with which they are exercised, does a people advance in civilization. Just in proportion as a people is placed under contrary influences, is its movement retrograde.

The science which teaches us how to foster these energies of mind is the science of Education. In few words, I would say, *the object of the science of Education, is, to render mind the fittest possible instrument for* DISCOVERING, APPLYING, *or* OBEYING, *the laws under which God has placed the universe.*

That all this is necessary, in order to carry forward the human species to the degree of happiness which it is destined, at some time or other, to attain, may be easily shown.

The laws of the universe must be *discovered*. Until they are discovered, we shall be continually violating them and suffering the penalty, without either possibility of rescue or hope of alleviation. Hence the multitude of bitter woes which ignorance inflicts upon a people. Hence the interest which every man should take in the progress of knowledge. Who can tell how countless are the infelicities which have been banished from the world, by the discovery of the simple law that a magnetized needle, when freely suspended, will point to the north and south!

Nor is it sufficient that a law be discovered. Its relations to other laws must be ascertained, and the means devised by which it may be made to answer the purposes of human want. This is called *application*, or *invention*. The law of the expansive power of steam was discovered by the Marquis of Worcester, in 1663. It remained, however, for the inventive power of Watt and Fulton, more than a century afterward, to render it subservient to the happiness of man. From want of skill in a single branch of this department of mental labor, the human race has frequently been kept back for ages. The ancients, for instance, came very near the invention of the printing press. Thus has it been with several other of the most important inventions. It makes a thoughtful man sad, at the present day, to observe how many of the most important agents of nature we are obliged to expose to the gaze of lecture-rooms, without being able to reveal a single practical purpose for which they were created.

But this is not all. A man may know a law of his Creator, and understand its application; but if he do not *obey* it, he will neither reap the reward nor escape the penalty which the Creator has annexed to it. Here we enter, at once, into the mysterious region of human will, of motive, and of conscience. To examine it at present is not my design. I will only remark, that some great improvement is necessary in this part of our nature, before we can ever reap the benefits of the present constitution of the universe. I do not think that any philosopher can escape the conviction, that when important truth is the subject of inquiry, we neither possess the candor of judgment, nor the humility of obedience, which befits the relations existing between a creature and his Creator. In proof of this, it is sufficient to refer to well known facts. Galileo suffered the vengeance of the Inquisition, for declaring the sun to be the centre of the planetary system! How slow were the learned in adopting the discoveries of Hervey or of Newton! Still more visible is this ob-

stinacy, when the application of a moral law is clearly discovered. Though supported by incontrovertible argument, how slowly have the principles of religious toleration gained foothold even in the civilized world! After the slave trade had been proved contrary to every principle of reason and conscience, and at variance with every law of the Creator, for nearly twenty years did Clarkson and his associates labor, before they could obtain the act for its abolition. And to take an illustration nearer home,—how coolly do we look on and behold lands held by unquestionable charter from Almighty God, in defiance of an hundred treaties by which the faith of this country has been pledged—in violation of every acknowledged law, human and divine, wrested from a people, by whose forbearance, a century ago, our fathers were permitted to exist! I speak not the language of party. I eschew and abhor it; but "I speak with the freedom of history, and I hope without offence." These examples are at least sufficient to show us, that the mind of man is not, at present, the fittest instrument possible for obeying the laws of his Creator, and that there is need, therefore, of that science which shall teach him to become such an instrument.

The question which will next arise, is this :—Can these things be taught? Is it practicable, by any processes which man can devise, to render mind a fitter instrument for discovering, applying and obeying the laws of his Creator? We shall proceed, in the next place, to show that all this is practicable.

1. It is practicable to train the mind to greater skill in *discovery*. A few facts will render this sufficiently evident.

It will not be denied that some modes of thinking are better adapted to the discovery of truth than others. Those trains of thought which follow the order of cause and effect, premises and conclusion, or, in general, what is considered the order of the understanding, are surely more likely to result in discovery than those which follow the order of the casual relations, as of time, place, resemblance and contrast, or, as it is commonly called, the order of the imagination. Discovery is the fruit of patient thought, and not of impetuous combination. Now it must be evident that mind, directed in the train of the understanding, will be a far better instrument of discovery than if under the guidance of the imagination. And it is evident that the one mode of thinking may be as well cultivated as the other, or as any mode whatsoever. And hence has arisen the mighty effect which Bacon produced upon the world. He allured men from the weaving of day-dreams to the employment of their reason. Just in proportion as we acquire skill in the use of our reason, will be the progress of truth.

Again; there can be no doubt that, in consequence of the teaching of Bacon, or, in other words, in consequence of improvement in education, the human mind has, in fact, become a vastly more skillful instrument of discovery than ever it was before. In proof of this, I do not refer merely to the fact, that more power has been gained over the agents of nature, and that they have been made to yield a greater amount of human happiness to the human race, within the last one hundred years, than for ten times that period before. This, of itself, would be sufficient to show an abundant increase of intellectual activity. I would also refer to the fact that several of the most remarkable discoveries have been made by different men at the same time. This would seem to show, that mind in the aggregate was moving forward, and that everything with which we are now acquainted must soon have been discovered, even if it had eluded the sagacity of those who were fortunate enough to observe it. This shows that the power of discovery has already been in some degree increased by education. What has been so auspiciously begun, can surely be carried to far greater perfection.

Again; if we inquire what are those attributes of mind on which discovery mainly depends, I think we shall find them to be patient observation, acute discrimination, and cautious induction. Such were the intellectual traits of Newton, that prince of modern philosophers. Now it is evident that these attributes can be cultivated, as well as those of taste or imagination. Hence, it seems as evident that the mind may be trained to discovery, that is, that mind may be so disciplined as to be able to ascertain the particular laws of any individual substance, as that any other thing may be done.

2. By *application* or *invention*, I mean the contriving of those combinations by which the already discovered laws of the universe may be rendered available to the happiness of man. It is possible to render the mind a fitter instrument for the accomplishment of this purpose.

In proof of this remark, I may refer you to the two first considerations to which I have just adverted; namely, that some trains of thought are more productive of invention than others, and that, by following those trains, greater progress has, within a few years, been made in invention, than within ten times that period before.

It is proper, however, to remark, that the qualities of mind on which invention depends, are somewhat dissimilar from those necessary to discovery. Invention depends upon accuracy of knowledge in detail, as well as in general, and a facility for seizing upon distant, and frequently recondite relations. Discovery has more to do with the simple quality, invention with the complex connections. Discovery views truth in the abstract; invention views it either in con-

nection with other truth, or in its relation to other beings. Hence has it so frequently taken place, that philosophers have been unable to avail themselves of their own discoveries; or, in other words, that the powers of discovery and of invention are so seldom combined in the same individual. In one thing, however, they agree. Both depend upon powers of mind capable of cultivation; and, therefore, both are susceptible of receiving benefit beyond any assignable degree, by the progress of education.

3. The mind may be rendered a fitter instrument for obeying the laws of the universe. This will be accomplished, when men, first, are better acquainted with the laws of the universe, and second, when they are better disposed to obey them. That both of these may be accomplished, scarcely needs confirmation.

For, first, I surely need not consume your time to prove, that a much greater amount of knowledge of the laws of the universe might be communicated in a specified time, than is communicated at present. Improvement in this respect depends upon two principles;—first, greater skill may be acquired in teaching; and second, the natural progress of the sciences is toward simplification. As they are improved, the more proximate relations of things are discovered, the media are rendered clearer, and the steps in the illustration of truth less numerous. As a man knows more of the laws of his Creator, he can surely obey them better.

And, secondly, those dispositions which oppose our meek and humble obedience, may be corrected. Candor may be made to take the place of prejudice, and envy may be exchanged for a generous ardor after truth. This a good teacher frequently accomplishes now. And that the Gospel of Jesus Christ does present a most surprising cure for those dispositions, which oppose the progress of truth and interfere with our obedience to the moral laws of our being, no one, who, at the present day, looks upon the human race with the eye of a philosopher, can with any semblance of candor venture to deny.

It would not be difficult, did time permit, by an examination of the various laws, physical, intellectual, and moral, under which we are placed, to show that the principles which I have been endeavoring to illustrate, are universal, and apply to every possible action of the most eventful life. It could thus be made to appear that all the happiness of man is derived from discovering, applying, or obeying the laws of his Creator, and that all his misery is the result of ignorance or disobedience; and hence, that the good of the species can be permanently promoted, and permanently promoted only by the accomplishment of that which I have stated to be the object of education.

I have thus far endeavored to show, from our situation as just such creatures, namely, under laws of which we come into the world ignorant, and laws which can only be known by a mind possessed of acquired power, that there is, in our present state, the need of such a science as that of education. I have endeavored to show what is its object, and also to show that that object may be accomplished. I will now take leave of this part of the subject, with a few remarks upon the relation which this science sustains to other sciences.

1. If the remarks already made have the least foundation in truth, we do not err in claiming for education the rank of a distinct science. It has its distinct subject, its distinct object, and is governed by its own laws. And, moreover, it has, like other sciences, its corresponding art,—the art of teaching. Now if this be so, we would ask how any man should understand this science, any more than that of mathematics or astronomy, without ever having studied it, or having even thought about it? If there be any such art as the art of teaching, we ask how it comes to pass that a man shall be considered fully qualified to exercise it, without a day's practice, when a similar attempt in any other art would expose him to ridicule? Henceforth, let the ridicule be somewhat more justly distributed.

2. The connections of this science are more extensive than those of any other. Almost any one of the other sciences may flourish independently of the rest. Rhetoric may be carried to high perfection, whilst the mathematics are in their infancy. Physical science may advance, whilst the science of interpretation is stationary. No science, however, can be independent of the science of education. By education their triumphs are made known; by education alone can they be multiplied.

Hence, thirdly, it is upon education that the progress of all other sciences depends. A science is a compilation of the laws of the universe on one particular subject. Its progress is marked by the number of these laws which it reveals, and the multiplicity of their relations which it unfolds. Now we have before shown that the number of laws which are discovered, will be in proportion to the skill of mind, the instrument which is to discover them. Hence, just in proportion to the progress of the science of education, will be the power which man obtains over nature, the extent of his knowledge of the laws of the universe, and the abundance of means of happiness which he enjoys.

If this be so, it would not seem arrogant to claim for education the rank of the most important of the sciences, excepting only the science of morals. And, hence, we infer, that it presents subjects vast enough, and interests grave enough, to task the highest effort

of the most gifted intellect, in the full vigor of its powers. Is it not so? If it be so, on what principle of common sense is it, that a man is considered good enough for a teacher, because he has most satisfactorily proved himself good for no one thing else? Why is it, that the utter want of sufficient health to exercise any other profession, is frequently the only reason why a man should be thrust into this, which requires more active mental labor in the discharge of its duties, than any other profession whatsoever? Alas! it is not by teachers such as these that the intellectual power of a people is to be created. To hear a scholar say a lesson, is not to educate him. He who is not able to leave his mark upon a pupil, never ought to have one. Let it never be forgotten, that, in the thrice resplendent days of the intellectual glory of Greece, teachers were in high places. Isocrates, Plato, Zeno, and Aristotle were, without question, stars of by very far the first magnitude, in that matchless constellation, which still surrounds with undiminished effulgence the name of the city of Minerva.

And, lastly, if the science of education be thus important, is it not worthy of public patronage? Knowledge of every sort is valuable in a community, very far beyond what it costs to produce it. Hence it is for the interest of every man to furnish establishments by which knowledge can be increased. Of the manner in which this should be afforded, it belongs to political economists to treat. Let me suggest only a very few hints on the subject. Books are the repositories of the learning of past ages. Longer time than that of an individual's life, and greater wealth than falls to the lot of teachers, are required to collect them in numbers sufficient for extensive usefulness. The same may be said of instruments for philosophical research. Let these be furnished, and furnished amply. Let your instructors have the use of them, if you please, gratuitously; and if you do not please, not so, and then, on the principles which govern all other labor, let every teacher, like every other man, take care of himself. Give to every man prominent and distinct individuality. Remove all the useless barriers which shelter him from the full and direct effect of public opinion. Let it be supposed, that, by becoming a teacher, he has not lost all pretensions to common sense; and that he may possibly know as much about his own business as those, who, by confession, know nothing at all about it. In a word, make teaching the business of men, and you will have men to do the business of teaching. I know not that the cause of education, so far as teachers are concerned, requires any other patronage.

I come now to the second part of the subject, which, I am aware, it becomes me to treat with all possible brevity.

II. In what manner shall mind be thus rendered a fitter instrument to answer the purposes of its creation?

To answer this question, let us go back a little. We have shown that the present constitution of things is constructed for man, and that man is constructed for the present constitution. As mind, then, is the instrument by which he avails himself of the laws of that constitution, it may be supposed that it was endowed with all the powers necessary to render it subservient to his best interests. Were it possible, therefore, it would be useless to attempt to give it any additional faculties. All that is possible, is, to cultivate to higher perfection those faculties which exist, or to vary their relations to each other. To cultivate to the utmost the original faculties of the mind, is to render it the fittest possible instrument for discovering, applying, and obeying the laws of its creation.

This is, however, an answer to the question in the abstract, and without any regard to time. But the question to us, is not an abstract question; it has regard to time. That is to say, we do not ask simply what is the best mode of cultivating mind, but what is the best mode of doing it now, when so many ages have elapsed, and so many of the laws of the universe have been discovered. Much knowledge has already been acquired by the human race, and this knowledge is to be communicated to the pupil.

All this every one sees at first glance to be true. Nearly all the time spent in pupilage, under the most favorable circumstances, is in fact employed in the acquisition of those laws which have been already discovered. Without a knowledge of them, education would be almost useless. Without it, there could evidently be no progressive improvement of the species. Education, considered in this light alone, has very many and very important ends to accomplish. It is desirable that the pupil should be taught *thoroughly;* that is, that he should have as exact and definite a knowledge as possible of the law and of its relations. It is desirable that he be taught *permanently;* that is, that the truth communicated be so associated with his other knowledge, that the lapse of time will not easily erase it from his memory. It is important, also, that *no more time be consumed in the process than is absolutely necessary.* He who occupies two years in teaching what might as well be taught with a little more industry in one year, does his pupil a far greater injury than would be done by simply abridging his life by a year. He not only abstracts from his pupil's acquisition that year's improvement, but all the knowledge which would have been the fruit of it for the remainder of his being.

If, then, all that portion of our time which is devoted to educa-

tion must be occupied in acquiring the laws of the universe, how shall opportunity be afforded for cultivating the original powers of the mind? I answer, an all-wise Creator has provided for this necessity of our intellectual nature. His laws, in this, as in every other case, are in full and perfect harmony.

For, first, the original powers of the mind are cultivated by use. This law, I believe, obtains in respect to all our powers, physical, intellectual, and moral. But it must be by the use of each several faculty. The improvement of the memory does not, of necessity, strengthen the power of discrimination; nor does the improvement of natural logical acuteness, of necessity, add sensibility to the taste. The law on this subject seems to be, that every several faculty is strengthened and rendered more perfect exactly in proportion as it is subjected to habitual and active exercise.

And, secondly, it will be found that the secret of teaching most thoroughly, permanently, and in the shortest time, that is, of giving to the pupil in a given time the greatest amount of knowledge, consists in so teaching as to give the most active exercise to the original faculties of the mind. So that it is perfectly true, that if you wished so to teach as to make the mind the fittest possible instrument for discovering, applying, and obeying the laws of the Creator, you would so teach as to give to the mind the greatest amount of knowledge; and, on the contrary, if you wished so to teach as to give to a pupil, in a given time, the greatest amount of knowledge, you would so teach as to render his mind the fittest instrument for discovering applying and obeying the laws of its Creator.

I do not forget that the discussion of the practical business of teaching is, on this occasion, committed to other hands. You will, however, I trust, allow me to suggest here, one or two principles which seem to me common to all teaching, and which are in their nature calculated to produce the results to which I have referred.

1. Let a pupil understand every thing that it is designed to teach him. If he can not understand a thing this year, it was not designed by his Creator that he should learn it this year. But let it not be forgotten, that precisely here is seen the power of a skillful teacher. It is his business to make a pupil, if possible, understand. Very few things are incapable of being understood, if they be reduced to their ultimate elements. Hence the reason why the power of accurate and natural analysis is so invaluable to a teacher. By simplification and patience, it is astonishing to observe how easily abstruse subjects may be brought within the grasp of even the faculties of children. Let a teacher, then, first understand a subject himself. Let him know that he understands it. Let him reduce it to

its natural divisions and its simplest elements. And then, let him see that his pupils understand it. This is the first step.

2. I would recommend the frequent repetition of whatever has been acquired. For want of this, an almost incalculable amount of invaluable time is annually wasted. Who of us has not forgotten far more than he at present knows? What is understood to-day, may with pleasure be reviewed to-morrow. If it be frequently reviewed, it will be associated with all our other knowledge, and be thoroughly engraven on the memory. If it be laid aside for a month or two, it will be almost as difficult to recover it as to acquire a new truth; and it is, moreover, destitute of the interest derived only from novelty. If this be the case with us generally, I need not say how peculiarly the remark applies to the young.

But lastly, and above all, let me insist upon the importance of universal practice of every thing that is learned. No matter whether it be a rule in arithmetic, or a rule in grammar, a principle in rhetoric, or a theorem in the mathematics; as soon as it is learned and understood, let it be practiced. Let exercises be so devised as to make the pupil familiar with its application. Let him construct exercises himself. Let him not leave them until he feels that he understands both the law and its application, and is able to make use of it freely and without assistance. The mind never will derive power in any other way. Nor will it, in any other way, attain to the dignity of certain, and practical, and available science.

So far as we have gone, then, we have endeavored to show that the business of a teacher is so to communicate knowledge as most constantly and vigorously to exercise the original faculties of the mind. In this manner he will both convey the greatest amount of instruction, and create the largest amount of mental power.

I intended to confirm these remarks by a reference to the modes of teaching some of the most important branches of science. But I fear that I should exhaust your patience, and also that I might anticipate what will be much better illustrated by those who will come after me. I shall, therefore, conclude by applying these considerations to the elucidation of some subjects of general importance.

1. If these remarks be true, they show us in what manner text-books ought to be constructed. They should contain a clear exhibition of the subject, its limits and relations. They should be arranged after the most perfect method, so that the pupil may easily survey the subject in all its ramifications; and should be furnished with examples and questions to illustrate every principle which they contain. It should be the design of the author to make such a book

as could neither be studied unless the pupil understood it, nor taught unless the instructor understood it. Such books, in every department, are, if I mistake not, very greatly needed.

If this be true, what are we to think of many of those school-books which are beginning to be very much in vogue amongst us? There first appears, perhaps, an abridgment of a scientific text-book. Then, lest neither instructor nor pupil should be able to understand it, without assistance, a copious analysis of each page or chapter or section, is added in a second and improved edition. Then, lest, after all, the instructor should not know what questions should be asked, a copious list of these is added to a third and still more improved edition. The design of this sort of work seems to be to reduce all mental exercise to a mere act of the memory, and then to render the necessity even for the use of this faculty as small as may be possible. Carry the principle but a little farther, and an automaton would answer every purpose exactly as well as an instructor. Let us put away all these miserable helps, as fast as possible, I pray you. Let us never forget that the business of an instructor begins where the office of a book ends. It is the action of mind upon mind, exciting, awakening, showing by example the power of reasoning and the scope of generalization, and rendering it impossible that the pupil should not think; this is the noble and the ennobling duty of an instructor.

2. These remarks will enable us to correct an error which of late has done very much evil to the science of education. Some years since, I know not when, it was supposed, or we have said it was supposed, that the whole business of education was to store the mind with facts. Dugald Stewart, I believe, somewhere remarks that the business of education, on the contrary, is to cultivate the original faculties. Hence the conclusion was drawn that it mattered not what you taught, the great business was to strengthen the faculties. Now this conclusion has afforded to the teacher a most convenient refuge against the pressure of almost every manner of attack. If you taught a boy rhetoric, and he could not write English, it was sufficient to say that the grand object was not to teach the structure of sentences, but to strengthen the faculties. If you taught him the mathematics, and he did not understand the Rule of Three, and could not tell you how to measure the height of his village steeple, it was all no matter,—the object was to strengthen his faculties. If, after six or seven years of study of the languages, he had no more taste for the classics than for Sanscrit, and sold his books to the highest bidder, resolved never again to look into them, it was all no matter,—he had been studying, to strengthen his facul-

ties, while by this very process his faculties have been enfeebled almost to annihilation.

Now, if I mistake not, all this reasoning is false, even to absurdity. Granting that the improvement of the faculties is the most important business of instruction, it does not follow that it is the only business. What! will a man tell me that it is of no consequence whether or not I know the laws of the universe under which I am constituted? Will he insult me, by pretending to teach them to me in such a manner that I shall, in the end, know nothing about them? Are such the results to which the science of education leads? Will a man pretend to illuminate me by thrusting himself, year after year, exactly in my sunshine? No; if a man profess to teach me the laws of my Creator, let him make the thing plain, let him teach me to remember it, and accustom me to apply it. Otherwise, let him stand out of the way, and allow me to do it for myself.

But this doctrine is yet more false; for even if it be true, that it matters not what is taught, it by no means follows that it is no matter how it is taught. The doctrine in question, however, supposes that the faculties are to be somehow strengthened by "going over," as it is called, a book or a science, without any regard to the manner in which it is done. The faculties are strengthened by the use of the faculties; but this doctrine has been quoted to shield a mode of teaching, in which they were not used at all; and hence has arisen a great amount of teaching, which has had very little effect, either in communicating knowledge, or giving efficiency to mind.

Let us, then, come to the truth of the question. It is important what I study; for it is important whether or not I know the laws of my being, and it is important that I so study them, that they shall be of use to me. It is also important that my intellectual faculties be improved, and therefore important that an instructor do not so employ my time as to render them less efficient.

3. Closely connected with these remarks is the question, which has of late been so much agitated, respecting the study of the ancient languages and the mathematics. On the one part, it is urged that the study of the languages is intended to cultivate the taste and imagination, and that of the mathematics to cultivate the understanding. On the other part, it is denied that these effects are produced; and it is asserted that the time spent in the study of them is wasted. Examples, as may be supposed, are adduced in abundance on both sides; but I do not know that the question is at all decided. Let us see whether any thing that we have said will throw any light upon it.

I think it can be conclusively proved, that the classics could be so taught as to give additional acuteness to the discrimination, more delicate sensibility to the taste, and more overflowing richness to the imagination. So much as this, must, we think, be admitted. If, then, it be the fact that these effects are not produced—and I think we must admit that they are not, in any such degree as might reasonably be expected—should we not conclude that the fault is not in the classics, but in our teaching? Would not teaching them better be the sure way of silencing the clamor against them?

I will frankly confess that I am sad, when I reflect upon the condition of the study of the languages among us. We spend frequently six or seven years in Latin and Greek, and yet who of us writes,—still more, who of us speaks them with facility? I am sure there must be something wrong in the mode of our teaching, or we should accomplish more. That can not be skillfully done, which, at so great an expense of time, produces so very slender a result. Milton affirms, that what in his time was acquired in six or seven years, might have been easily acquired in one. I fear that we have not greatly improved since.

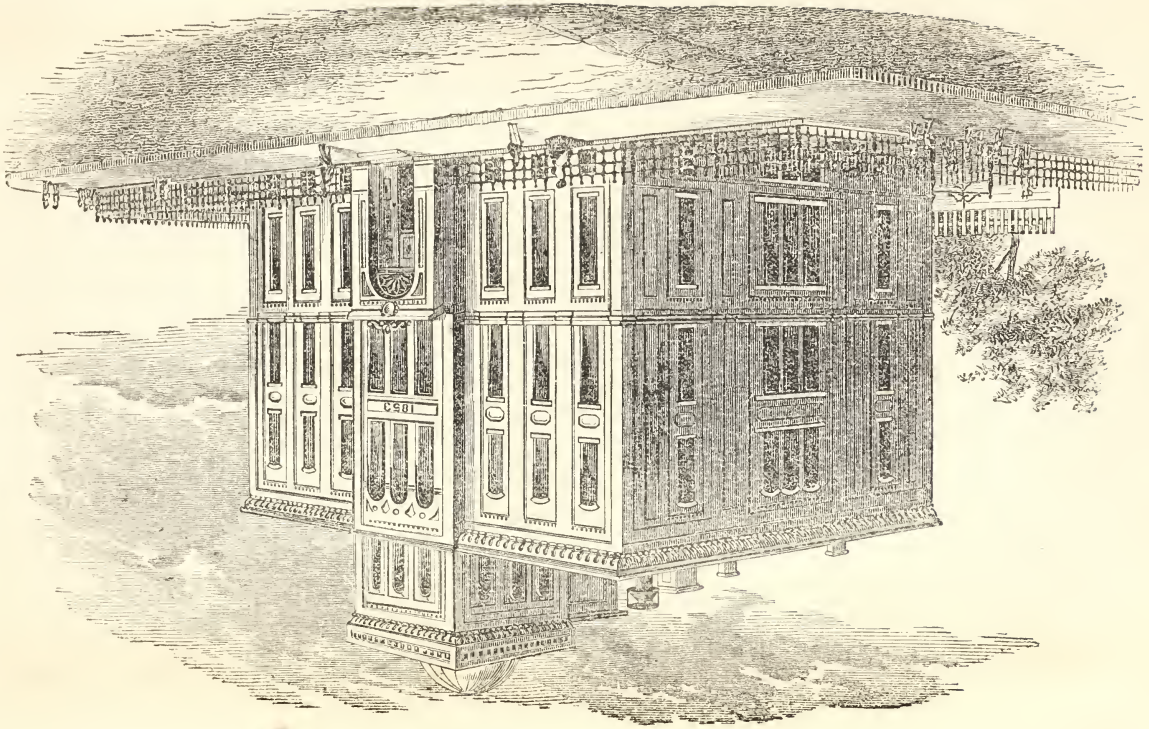
Again, we very properly defend the study of the languages on the ground that they cultivate the taste, the imagination, and the judgment. But is there any magic in the name of a classic? Can this be done by merely teaching a boy to render, with all clumsiness, a sentence from another language into his own? Can the faculties of which we have spoken, be improved, when not one of them is ever called into action? No. When the classics are so taught as to cultivate the taste and give vigor to the imagination,—when all that is splendid and beautiful in the works of the ancient masters, is breathed into the conceptions of our youth,—when the delicate wit of Flaccus tinges their conversation, and the splendid oratory of Tully, or the irresistible eloquence of Demosthenes, is felt in the senate and at the bar—I do not say that even then we may not find something more worthy of being studied,—but we shall then be prepared, with a better knowledge of the facts, to decide upon the merits of the classics. The same remarks may apply, though perhaps with diminished force, to the study of the mathematics. If, on one hand, it be objected that this kind of study does not give that energy to the powers of reasoning which has frequently been expected, it may, on the other hand, be fairly questioned whether it be correctly taught. The mathematics address the understanding. But they may be so taught as mainly to exercise the memory. If they be so taught, we shall look in vain for the anticipated result. I suppose that a student, after having been taught one class of geo-

metrical principles, should as much be required to combine them in the forms of original demonstration, as that he who has been taught a rule of arithmetic should be required to put it into various and diversified practice. It is thus alone, that we shall acquire that δυναμις αναλυτικη, the mathematical power which the Greeks considered of more value than the possession of any number of problems. When the mathematics shall be thus taught, I think there will cease to be any question, whether they add acuteness, vigor and originality to mind.

I have thus endeavored, very briefly, to exhibit the object of education, and to illustrate the nature of the means by which that object is to be accomplished. I fear that I have already exhausted your patience. I will, therefore, barely detain you with two additional remarks.

1. To the members of this Convention allow me to say, Gentlemen, you have chosen a noble profession. What though it do not confer upon us wealth?—it confers upon us a higher boon, the privilege of being useful. What though it lead not to the falsely named *heights* of political eminence?—it leads us to what is far better, the sources of real power; for it renders intellectual ability necessary to our success. I do verily believe that nothing so cultivates the powers of a man's own mind as thorough, generous, liberal, and indefatigable teaching. But our profession has rewards, rich rewards, peculiar to itself. What can be more delightful to a philanthropic mind, than to behold intellectual power increased a hundred fold by our exertions, talent developed by our assiduity, passions eradicated by our counsel, and a multitude of men pouring abroad over society the lustre of a virtuous example, and becoming meet to be inheritors with the saints in light—and all in consequence of the direction which we have given to them in youth? I ask again, what profession has any higher rewards?

Again, we at this day are in a manner the pioneers in this work in this country. Education, as a science, has scarcely yet been naturalized among us. Radical improvement in the means of education is an idea that seems but just to have entered into men's minds. It becomes us to act worthily of our station. Let us by all the means in our power second the efforts and the wishes of the public. Let us see that the first steps in this course are taken wisely. This country ought to be the best educated on the face of the earth. By the blessing of Heaven, we can do much towards the making of it so. God helping us, then, let us make our mark on the rising generation.


1853

X. SCHOOL ARCHITECTURE.

Plans of Public School Houses in Philadelphia.

Prior to 1818, a system of charity schools was maintained by a society of benevolent individuals, which had been aided by a small appropriation from the city, from 1808. In these schools 2,600 poor children were educated in 1817, at the cost of $11 per scholar.

In 1818, against violent and interested opposition from various quarters, the present system was commenced, and the first school opened in a hired room under the Lancastarian method of instruction.

In 1819, there were six schools established, one school-house built, ten teachers employed, and 2,845 children instructed in reading, writing, and arithmetic, at an aggregate expense of $23,049 45, of which near $19,000 was invested in land, and building, and furniture.

In 1823, the first school for colored children was established.

In 1826, there were 4,144 children in nine schools, at an aggregate expense of $22,444.

In 1833, an infant model school was organized. There were at this date 5,768 children in thirteen schools, under twenty-three teachers, instructed at an aggregate expense of $53,042, of which $23,000 was for school buildings and fixtures.

In 1836, twenty-six primary schools were established. A committee of the board of Controllers, visited the public schools of Boston and New York, and at their suggestion the system of instruction was modified, and additional teachers, at a higher compensation, were employed, and the services of juvenile monitors dispensed with. At this date, 11,127 children were instructed, in forty-eight schools of different grades, at the aggregate expense of $75,017, of which $23,000 was for land and buildings. Thirteen school-houses had been erected up to this date.

In 1837, sixty primary schools were in operation, with nearly six thousand scholars. These schools were eminently successful in gathering up the young children who would otherwise not be at school, and in relieving the higher schools of a class of pupils, who only embarrassed the teachers and retarded the more advanced learners. During this year, the corner stone of the Central High School building was laid, with an astronomical observatory attached. The monitorial system was still further dispensed with or modified. At this date, 17,000 children were in all the schools, and the expenditure amounted to $191,830, of which $112,000 was for land, buildings, and furniture. Of this last amount, $89,000 was received from an appropriation by the State of $500,000 for school-houses.

In 1830, the Central High School was opened, with professors in various branches of Classical, English, Belles Letters, Mathematical, Astronomical, and Physical sciences, and before the close of the year, reorganized on a plan submitted by President Bache, of the Girard College of orphans. More than 18,000 children were in regular attendance at school, and the expenditure for the year amounted to $188,741, of which $82,000 was for land, buidings, and furniture. The ordinary expense of the system was about $6 for each pupil.

In 1848, a Normal School was opened under the charge of A. T. W. Wright, "for the thorough training of female teachers in such practical exercises as will discipline and develope the mind, adorn and elevate the character, insure the best modes of imparting knowledge, and prevent fruitless experiments, manifold mistakes, and inseparable loss of time."

In 1850, evening or night schools were opened by the Controllers in different parts of the city, to accomodate those to whom circumstances may have denied the advantages of education in early life, as well as to enable those whose necessities will not permit to attend the day school, to share the benefits of that mental training so necessary to fit them to become useful citizens. The attendance in these schools, during the winter of 1852–53, was 7,772; of which number, 5,776 were males, and 1,995 females. The average age of the males was 17 years 4 months, and of the females 16 years 9 months. Of the whole number, 3,235 were born in Philadelphia; 1,452 in other parts of the United States; and 3,085 were of foreign birth. Of the 7,772, when admitted, 943 could not read, 1,581 could not write, and 1,943 were entirely ignorant of the use of figures. The cost of supporting the night schools, in the winter of 1852–53, was $16.907 or $2.17½ for each pupil.

The system of public instruction embraced, in 1853:

I. Classified schools, viz.: 152 primary schools; 35 secondary schools; 55 grammar schools; and 1 high school for boys—each grade having its appointed course of study and requisites of admission.

II. Unclassified schools, viz.: 42 day schools and 30 night schools, scattered through the less populous portions of the district, or where the habits or circumstances of the population are not favorable to regularity of attendance. The pupils of these schools are classified, but not according to the rules applicable to the schools in the first division.

III. Normal school, for training female teachers for the different grades of schools.

The attendance in all the schools was as follows: in the 286 day schools, 50,085, of which number 25,836 were males, and 24,249 females; in the 20 night schools 7,772, of which number 5,776 were males, and 1,990 females—making an aggregate attendance of 57,857 scholars.

The entire expense of supporting the system, for the year ending June 30, 1853, including text-books and stationary, was $386,122.32, exclusive of the sum of $25,181, paid for rent of ground and houses, and of the estimated interest on $932,290.02, the cost of grounds and buildings now belonging to the Controllers. Of the entire expense, the sum of $31,307 was derived from the State appropriation, and the balance from a tax on the property of the city.

Exclusive of rent and interest on cost of school-houses, the cost of educating 57,857 pupils, in the day and night schools, was $6.67 for each pupil; and including rent and interest, $7.06.

The cost of supporting the unclassified, primary, secondary, Grammar, High, and Normal Schools, with an attendance of 50,085 pupils, was $358,714.70, including the cost of books and stationary furnished by the Controllers, and exclusive of the rent of school-room and the interest on the cost of grounds and buildings—or $7.16 to each pupil.

The cost of the night schools, with an attendance of 7,772 pupils, was $16.907.02, or $2.17½ to each pupil.

The cost of the High School with an attendance of 519 pupils, was $17,449.53, or $32.97 for each pupil.

The cost of Normal School, and School of Practice, with 519 pupils, (including pupil-teachers and children,) was $6,796.72, or $10.98 to each pupil.

The cost of the grammar, secondary, primary, and unclassified schools, with an attendance of 49,052 pupils, was $335,468.45, or $6.84 to each pupil.

The cost of furnishing books and stationary, included in the foregoing calculations, was 75½ cents for each pupil for the year.

The progress and influence of the Central High School, is thus set forth by Dr. Hart.

Commencing from small beginnings, in 1838, with only sixty-three students and four professors, and with a character not much beyond that now attained by our best Grammar Schools, the High School has gradually enlarged its corps of professors, its number of students, and its course of studies, until it has assumed, in public estimation, the rank, as from the Legislature of the Commonwealth, it has received the distinctive attributes of a college. The minimum age for admission was originally twelve, and few students were then admitted much beyond that age. The minimum age for admission is now thirteen, while the actual age of those admitted, averages nearly fifteen. The preparatory studies at the same time have been nearly doubled, raising thereby, in a corresponding degree, the character and studies of the Grammar Schools, and of the whole connected series of schools below them.

The number of students in attendance on the High School, during the last six years, has been constantly a little over 500, and it is at this time 516. During the fifteen years that the High School has existed, 2,805 students have been admitted to its privileges, of whom 2,289 have entered upon the active duties of life, and are to be found in almost every walk of professional, commercial, and mechanical business. These young men, it is true, did not all complete the full course of study. Some of them were not more than a year, a few not more than six months, in the school. Yet, of the great majority of them, it is evident that they were long enough in the institution to have received from it an abiding moral and intellectual influence. The average time of their continuance in the school, was over two years, while many of them completed the full course of four years. The institution, therefore, young as it is, may justly claim to have conducted through a liberal course of study, more young men, even in this infancy of its career, than some of our most honored colleges, which have already celebrated their hundredth anniversary. The graduates of the High School are admitted, without further preparation, to the study of law, medicine and divinity. As teachers, they are rapidly placing themselves in the front ranks of the profession. Our own public schools have felt the benefit of their influence, and applications are constantly received for their services, in organizing and conducting important educational establishments in other states. The alumni of the High School have furnished the most successful reporters for the United States Senate and House of Representatives. Large numbers of them are engaged in civil engineering, and not a few of them are connected with that important scientific undertaking, the United States Coast Survey. They are engineers in the Japan Expedition, surgeons in the navy of the United States, miners and merchants in California, and engaged, it is believed, in some capacity, in every State in the Union.

All these young men are bound together by a tie of affection for the public schools, and particularly for the High School, the strength of which is even more than proportionate to the benefit they have received. I have been often surprised at the liveliness and fervor of the interest which they have shown towards their Alma Mater. A large part of them, all who were in the school as long as two years, are united in a general society, known as the "Alumni Association," numbering now 760. Besides this, there are numerous smaller associations, meeting weekly as literary or debating societies, for the purposes of following up the intellectual culture which they commenced at school. These associations differ from the ordinary literary societies in colleges, inasmuch as they do not consist of the undergraduates, but are made up entirely of those who have left school. They discuss literary and scientific subjects, prepare essays and lectures, appoint committees to report on questions of science or art, submitted by the members, and receive communications on these subjects from such of their members as have removed to other parts of the country.

When it is recollected that the vast majority of this number settle in our midst, that they are to be found in every walk of honorable enterprise, professional, mercantile and mechanical, and that from the character of the education which they have received, they will naturally acquire positions of greater influence than others who have had less favorable advantages, it is difficult to overestimate their growing importance as a body. There are certainly not less than eighteen hundred of these young men now engaged in active life in the city of Philadelphia, at ages varying from fifteen to thirty. Such is the character which they have acquired among the citizens for successful attention to whatever they undertake, that not a week passes

without applications being received at the school for some of its alumni. Eligible situations in the very best stores and counting houses in the city are offered to them without solicitation. They are constantly advertised for, hoc nomine, in the public papers. These facts would seem to indicate that the course of instruction and discipline provided by the controllers has been such as to fit the students of the High School for the actual wants of life. It is gratifying to observe, also, that the habits and the moral training, even more than the intellectual instruction, are constantly mentioned as among the qualities that have brought our alumni into request.

OCCUPATIONS *of the* 2,107 *pupils who graduated or left during the eleven years ending July 22d*, 1853.—Architects 5, Bakers 5, Blacksmiths 48, Blind Makers 2, Bookbinders 19, Brewer 1, Bricklayers 47. Brickmakers 5, Brushmaker 1. Cabinetmakers 14, Cadets 3, Carpenters 166, Carvers and Gilders 2, Chairmakers 3, Chemists 12, Clergymen 9, Clerks 199, Coachmaker 1, Coachtrimmers 2, Conveyancers 76, Coopers 10, Copper-plate printers 2, Copper-smiths 2, Cordwainers 62, Curriers, 14, Cutlers 2. Dentists 10, Druggists 69, Dyers 2. Engineers 51, Engravers 55 Farmers 95. Gas fitters 7, Gilders 4, Glasscutters 3, Goldbeater 1, Grocers 27. Hatters 13. Ironfounders 2, Iron railing maker 1. Jewellers 21. Lawyers 29, Locksmiths 3. Machinists 91, Manufacturers 13, Mariners 48, Masons 4, Miller 1, Millwrights 3, Morocco dresser 1, Moulders 2. Painters 13, Paper hanger 1, Patternmakers 2, Physicians 34, Plasterers 2, Ploughmaker 1, Plumbers 3, Potter 1, Printers 76. Saddlers 19, Sailmakers 2, Ship Carpenters 9. Shipjoiners 2, Shipwrights 40, Silversmiths 2, Stereotypists 2, Stone cutters 9, Storekeepers 439, Surveyors 3. Tailors 15, Tanner 1, Teachers 72, Tinsmiths 8, Tobacconists 5, Turners 6, Type founders 4. Umbrellamakers 4. Upholsterer 1. Watchmakers 6, Weavers 5, Wheelwrights 8. Not ascertained 29. Deceased while pupils 10.—Total, 2,107.

OCCUPATIONS *of the Parents or Guardians of the pupils admitted, from the opening, October 22d*, 1838, *to July 16th*, 1853.—Agents 6, Aldermen 2, Artists 3, Auctioneers 2. Bakers 21, Barbers 2, Blacksmiths 37, Blindmakers 2, Boarding-house keepers 13, Boilermaker 1, Bonnet pressers 3, Bookbinders 12, Booksellers 5, Bottlers 3, Brassfounders 6, Brewers 11, Bricklayers 29, Brickmakers 14, Bridlebit makers 2, Brokers 28, Brushmakers 12, Button-maker 1, Butcher 1. Cabinetmakers 35, Cap-maker 1, Carder 1, Car-builder 1, Carpenters 245, Carrier 1, Carters 24, Carvers and Gilders 3, Caulker 1, Chairmakers 6, Chaise-driver 1, Chemists 4, Clergymen 41, Clerks and Accountants 159, Coachmakers 6, Coachtrimmer 1, Coal dealers 8, Coal viewer 1, Coffee roaster 1, Coiners 2, Collectors 6, Combmakers 13, Comedians 2, Commission Merchants 11 Conductors 3, Confectioners 10, Contractor 1, Conveyancers 9, Coopers 16, Copperplate printer 1, Copper-smiths 1, Corders 3, Cordwainers 128, County Commissioner 1, Curriers 18, Custom-house officers 3, Cutlers 2. Daguerreotypists 2, Dealers 22, Dentists 14, Distillers 10, Draymen 4, Drovers 3, Druggists 29, Dry goods Merchants 12, Dyers 10, Dye-sinkers 1. Editors 2, Engineers 11, Engravers 21. Farmers 42, Fishermen 7, Flour Inspector 1, Frame maker 1, Furriers 3. Gardeners 4, Gentlemen 4, Gentlewomen, (widows) 134, Gilders 4, Glass-blowers 5, Glove-maker 1, Goldbeaters 2, Grocers 100, Guager 1, Gunsmith 1. Hardware Merchants 12, Hair-dresser 1, Hatters 34, Hay Merchants 2, Horse dealers 2, Hose-makers 2, Hucksters 2. Ice-dealers 3, Importers 3, Inn-keepers 54, Iron-founders 8. Jewellers 16, Judges 6. Laborers 59, Lampmaker 1, Lapidary 1, Lastmakers 3, Lawyers 35, Lime burner 1, Livery Stable keepers 3, Locksmiths 4, Lumber Merchants 9. Machinists 47, Mantuamakers 35, Manufacturers 73. Marble Mason 1, Mariners 36, Mast-Makers 2, Mathematical Instrument makers 6, Measurer and Surveyor 1, Merchants 145, Military Cap maker 1, Millers 12, Milliners 10. Millwrights 3, Miners 2, Morocco-dressers 4, Musical Instrument maker 1, Moulder 1. Organ builder 1, Oystermen 2. Painters 13, Paper Box makers 4, Paperhangers 2, Paper manufacturer 1, Pattern-makers 3, Paviors 2, Pawnbrokers 4, Pedlars 2. Physicians 62, Piano forte makers 3, Plane makers 2, Plasterers 20, Plumbers 6, Porters 2, Portrait Painters 2, Potters 2, Printers 42, Prison-keeper 1, Publisher 1, Pumpmakers 4. Reedmaker 1, Refiner 1, Reporter 1, Rigger 1. Saddlers 31, Sailmakers 4, Sailing Masters 2, Salesmen 4, Sashmaker 1, Saw-makers 2, Sawyers 2, Scale maker 1, Seamstresses 28, Shipchandler 1, Shipjoiners 5, Shipsmiths 3, Shipwrights 29, Shuttle-maker 1, Silver-platers 3, Silver-smiths 4, Skin dresser 1, Slater 1, Soap boilers 2, Spar makers 2, Spectacle makers 2, Spinner 1, Spooler 1, Spring makers 2, Stage drivers 3, Starch manufacturer 1, Stereotype-founders 2, Stockmakers 2, Stone cutters 17, Stone Masons 5, Storekeepers 139, Stove finisher 1, Stove maker 1, Superintendent of Gas Works 1, Surgical Instrument makers 10, Surveyors 2, Suspender maker 1. Tailoresses 7, Tailors 86, Tallow Chandlers 4, Tanners 5, Teachers 49, Tinsmiths 16, Tobacconists 16, Traders 4, Tube maker 1, Turners 9, Type-founders 4. Umbrella makers 8, Undertakers 2, Upholsters 4. Varnisher 1, Victuallers 22. Warpers 2, Watchmakers 12, Watchmen 13, Weavers 39, Weigh Master 1, Wheelwrights 14, Whipmaker 1, Worker in Metal 1.—Total, 2,805.

TEACHERS AND EXPENSE OF NORMAL SCHOOLS.—The following statistics of the Normal School, and Model Schools, or Schools of Practice are taken from the Report of the Controllers, for 1850.

NORMAL SCHOOLS *located in Chester Street, above Race.*

Number of Pupil Teachers—Girls 136. Average attendance 129.

A. T. W. Wright, Principal,	$1,000 00
Mary E. Houpt, Teacher of Grammar, &c.,	300 00
Mary E. Brown, Teacher of Reading, &c.,	300 00
Anna Vanarsdalen, Teacher of Arithmetic, &c.,	300 00
Mary E. Tazewell, Teacher of History, &c.,	300 00
E. W. Mumford, Teacher of Drawing,	150 00
George Kingsley, Teacher of Music,	150 00

MODEL SCHOOLS, *Chester Street, above Race.*

Girls' Grammar Schools.—Total 230. Average attendance 200.

Sally F. Dawes, Principal,	$500 00
Mary Hunt, Assistant,	250 00

Boys' Secondary School.—Total 157. Average attendance 140.

Martha C. Brodie, P incipal,	$300 00
Margaret Bell, Assistant,	200 00
Total expense of the Normal School,	$2,694 66
" " " Model Schools,	2,382 39
	$5,077 05

The total expense of the Normal School to the city, exclusive of the expense of the Model Schools. which would be increased by their disconnection from it, can not exceed $2,000, and for this sum, every Primary, Secondary, and Grammar School, will derive benefits which could not be secured by the direct expenditure of a much larger sum. The Controllers bear the following testimony to the results of the school for 1850: "The Normal School has been in successful operation through the year, and has fully met the expectations of its most sanguine friends. Already a number of the pupils have been elected as teachers in several of our schools; and from their efficiency and aptness to teach, we may look to this school for a constant supply of teachers, not only well instructed in the different branches taught in our public schools, but capable also of imparting it to their pupils."

The following statistics of the Public Schools of Philadelphia, are gathered from the "*Thirty-second Annual Report of the Controllers of the Public Schools of the City and County of Philadelphia*, composing the First School District of Pennsylvania, for the year ending June 30, 1850." pp. 244. The whole document is highly creditable to the city, and the Report of John S. Hart, LL.D., Principal of the High School, as well as that of Dr. Wright, Principal of the Normal School, should be read and studied by every officer and teacher connected with the administration and instruction of Public Schools in every large city in our country. It must lead to the establishment of a High School where it does not now exist, and of a Normal School in each city, as Boston, Providence, New York, Cincinnati, New Orleans, &c.

Population of First School District, in 1850,	425,000
Number of Public Schools,	256
Classification of the Schools,—	
High School for Boys,	1
Normal School,	1
Grammar Schools,	53
Secondary Schools,	29
Primary Schools,	132
District or unclassified Schools,	40
Number of Scholars,—	
Males,	23,706
Females,	21,677
Total,	45,383
Number of Teachers,—	
Male,	81
Females,	646
Total,	727
Average number of pupils to each Teacher,	62
Amount expended during the year, for	
Salaries and Teachers,	$178,325 84
Books and Stationery	36,213 07
Sites, Buildings and Furniture,	40,906 63
Fuel, Furnaces and Stoves,	13,422 72
Total expense for all School purposes,	$332,433 21
Amount of current expenses, exclusive of houses and furniture,	$291,526 58
Average of current expense to each pupil,	6 42
Average of expense for each pupil, exclusive of books &c.,	5 67
Average expense of books and stationery to each pupil,	75

The Statistics of the Public Schools for the year ending Dec. 31st, 1860, are as follows:—

Population of the First School District, in 1860,		568,034
Total number of Pupils, boys,	32,486	
" " girls,	31,044	Total, 63,530
" Teachers, males,	80	
" " females,	1,117	Total, 1,197
" Schools,		335
" viz., 1 High School for boys,		550
" " 1 " girls and Normal School,		340
54 Grammar Schools,		11,353
59 Secondary, 170 Primary, and 50 Unclassified,		51,287
Expenditures for 1860,		$512,014.16
Salaries of Teachers,		337,603.07
Rents of School House,		26,534.73
Books and Stationery,		41,619.74
Fuel,		16,492.25
Night Schools,		4,754.41
Gross Expense of Central High School,		$22,679.98
" " Girls High and Normal School,		8,711.15
Rate per pupil in High School,		38.52



Fig. 1.—Perspective of Jefferson Grammar School, Philadelphia.

Plan and Description of Jefferson Grammar School-house in Philadelphia.

Jefferson Grammar School is located in Fifth-street above Poplar, and was erected in 1836. The lot is 100 feet on the street, and 120 feet deep, and the space not occupied by the building and the walks, is planted with the choicest shrubs and flowers, which are kept in beautiful condition by the teacher and pupil. For these, the fountain, and other embellishments, the children and the public owe a large debt of gratitude to Daniel S. Beideman Esq., who has thus introduced a new element of physical, moral, esthetical education into the public schools of this section of the city.

The children of the school exhibit a commendable pride in taking care of the grounds, and in protecting the shrubbery, flowers, and other embellishments from the depredations of the "outside barbarians." The influence, direct and indirect, of these decorations, and of the daily care and interest in their preservation by the pupils, was soon manifest in their improved manners and tastes, and in the improved habits of the whole neighborhood. And why can not every city school-house, even when located in the most crowded neighborhood, have its plat of flowers, and its attractions of verdure and foliage, if it must be on a small scale, and if no other place can be afforded, on the walls of the inclosures? Why may not a vase of flowers always adorn the table of the teacher, and bust of orator, poet, patriot, and philanthropist, fill, each its appropriate nich around the school-room? As has been justly remarked by Mrs. Sigourney, in a valuable "Essay on the Cultivation of the Beautiful in Common Schools"—the expense of such decorations will not be thrown away, the beautiful objects will not be defaced, and the fair scenery will not be desecrated. It will be easier to enforce habits of neatness and order among objects whose taste and value make them worthy of care, than amid that parsimony of apparatus and adornment, whose pitiful meanness operates as a temptation to waste and destroy.

The building is 100 feet by 50, and three stories high. Each story is divided into one large school-room, with four class rooms in connection. The first story is occupied by a Primary School; the second, by the girls department of the Grammar School, and the third, by the boys' department.

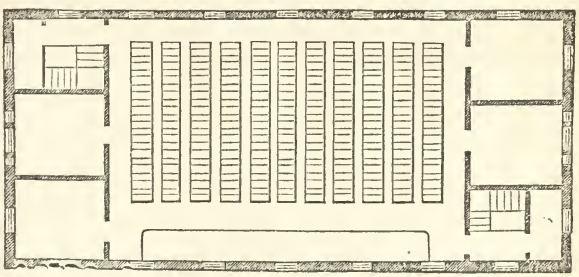
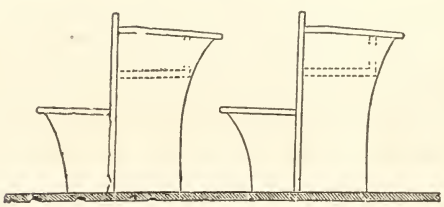


Fig. 2.—Second Floor.



Plan and Description of North-East Grammar School-house, Philadelphia.

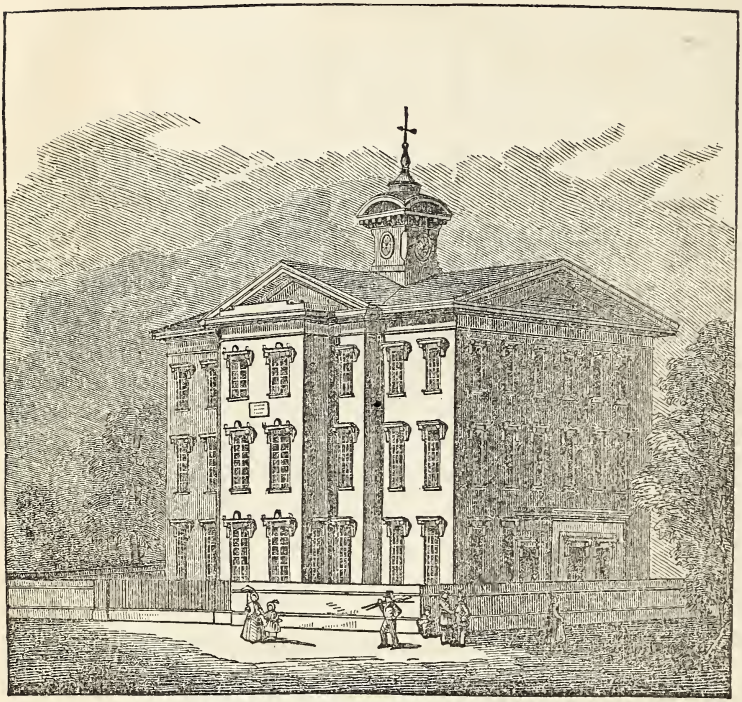


Fig 1.—Perspective.

The Grammar School-house on New street, between Second and First-streets, in Philadelphia, was erected after plans and specifications made by Samuel Sloan, Architect, in 1852. It is 81 feet 6 inches front, by 65 feet 6 inches deep, and three stories high, each story being fifteen feet in the clear. The basement, windows, and door trimmings are of the best blue marble, finely cut and polished, and the walls are of the best pressed brick. All the outside walls are laid with a hollow space of four inches—the inner and the outside walls being tied together with alternate bricks in the heading courses.

The building is warmed by three of Chilson's furnaces, of the largest size, and ventilated by a shaft, extending from the cellar to the top of the roof, with lateral flues and openings from each story, with a stove at the base in the cellar, to warm the shaft, to quicken the discharge of the foul air, both in winter and summer.

The peculiarity of this, and the more recently constructed school-houses in Philadelphia, is in the plan of the school-rooms. Instead of one large room, with two or more class rooms in connection on each floor, each story is divided into four apartments, of suitable size to accommodate the number of pupils assigned to one teacher, with movable glass partitions. By this arrangement, the Principal can have a full view of all the pupils and assistants on the same floor, while each division is protected from annoyance or interruption from the exercises of the other. By removing the glazed partitions,—one half of which is admitted into the wainscotting below, and the other, into the wainscotting above, and are so hung as to balance each other,—the several apartments are thrown into one, and the whole school is then within the hearing and voice of the principal

The following cut, Fig. 2, represents the first floor of the North-east Grammar School, and gives a good idea of the new plan of arranging the school-rooms.

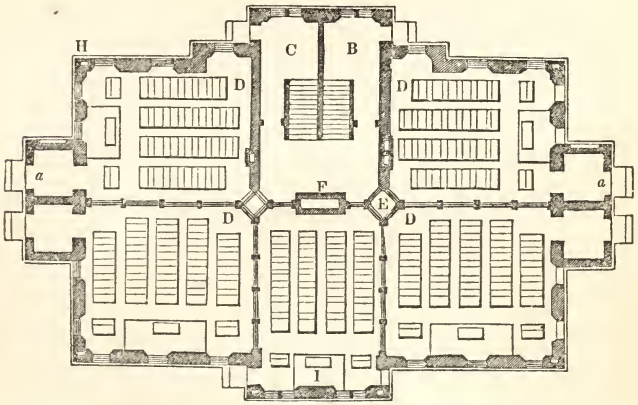
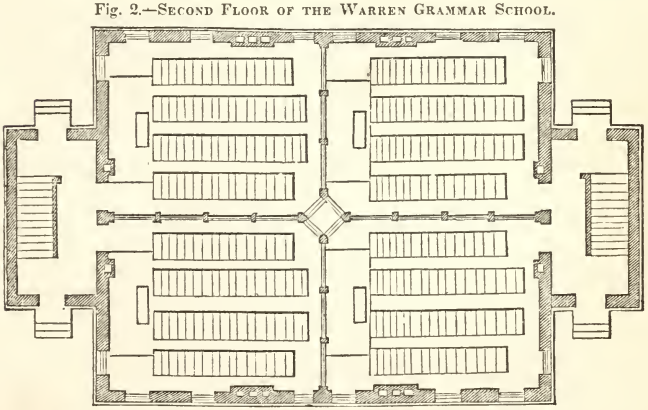


Fig. 2.—First Floor of North-east Grammar School.

a, a, a, a—Entrance lobby to the rooms on the ground plan.
B—Entrance and stairway leading to the second story.
C—Entrance and stairway leading to the third story.
D, D, D, D, D—Class rooms to accommodate 60 pupils each.
E, E—Vestibules, which afford a communication from one room to the other, having glazed doors on its four sides.
F—A shaft, which contains all the hot-air pipes, from which they branch to the various rooms on each story and discharge through register in the floor.
The vestibules E, E, on the second and third stories, are also the entrances to the class rooms from the outer gallery or landing of the stairs.
H, H, H, H, H, H—The ventilating flues, which are placed in the angles of the rooms opposite to that of the hot-air registers.
I, I, I, I, I—The teachers desk, with a small platform 6 feet broad by 8 feet long.

Fig. 2.—Second Floor of the Warren Grammar School.



The Warren Grammar School-house is situated on Robertson-street, was built in 1852, on the same general plan as the North-east Grammar School, the description of which is applicable to this.

PLAN OF WARREN GRAMMAR SCHOOL-HOUSE.

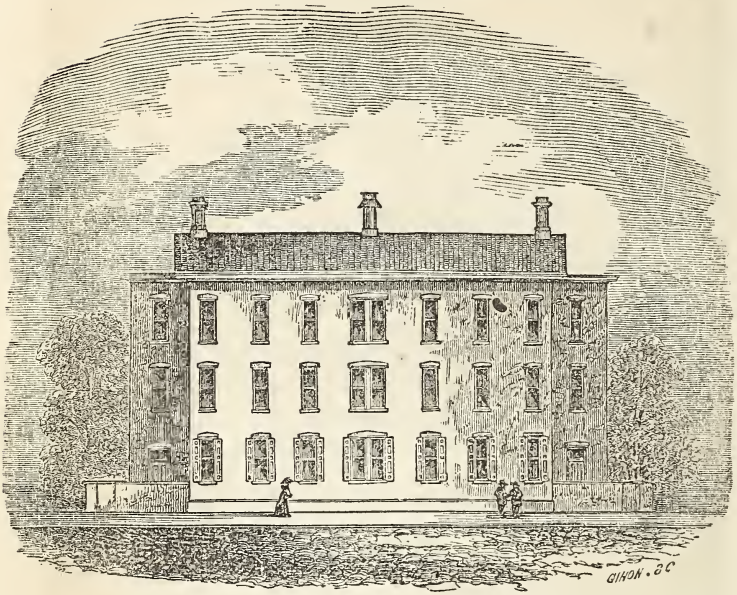


Fig. 1.—PERSPECTIVE OF WARREN GRAMMAR SCHOOL-HOUSE.

The Warren Grammar School-house is situated on Robertson-street, was built in 1852, on the same general plan as the North-east Grammar School, the description of which is applicable to this.

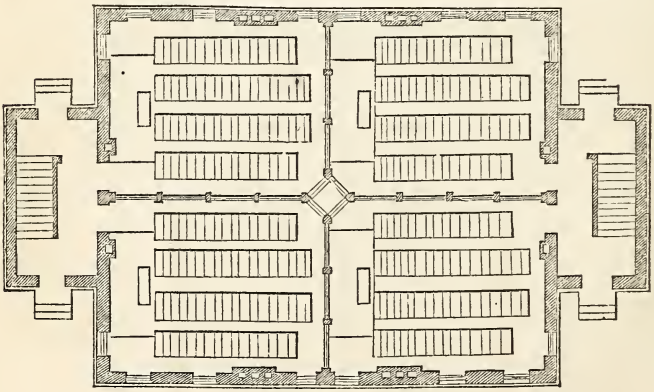


Fig. 2.—PLAN OF THE INTERIOR.

PLAN OF GLENWOOD SCHOOL-HOUSE, PHILADELPHIA.

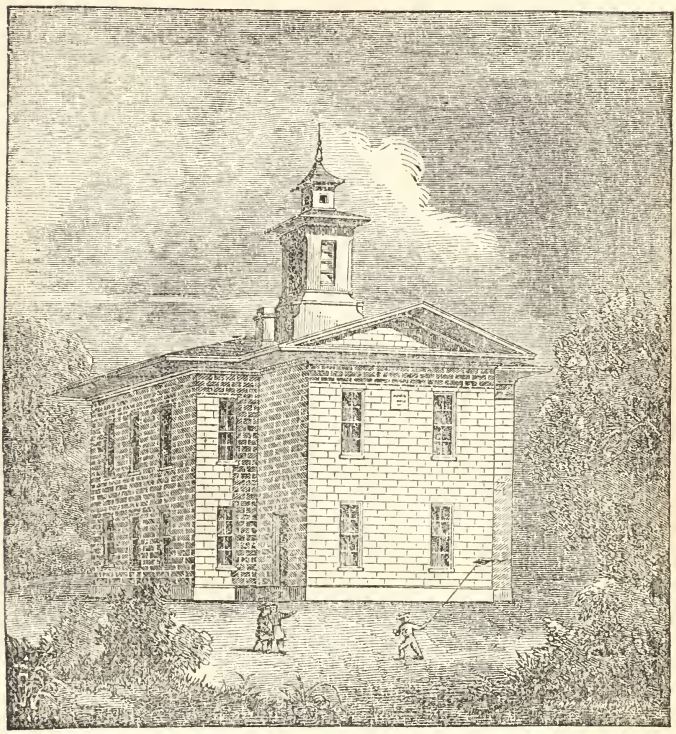


Fig. 1.—PERSPECTIVE OF GLENWOOD SCHOOL-HOUSE.

Glenwood School-house is situated on Ridge-road, and is intended for an Unclassified school. The building is 66 by 46 feet, besides the projection, and is two stories high. Each story is divided into two apartments, separated by a glazed partition.

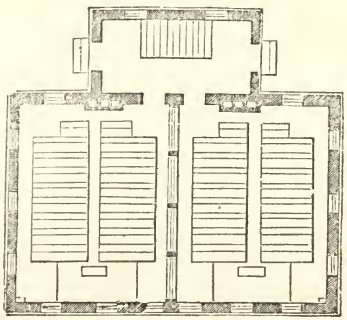


Fig. 2.—PLAN OF FIRST FLOOR.

Plans and Description of the Central High School, Philadelphia.

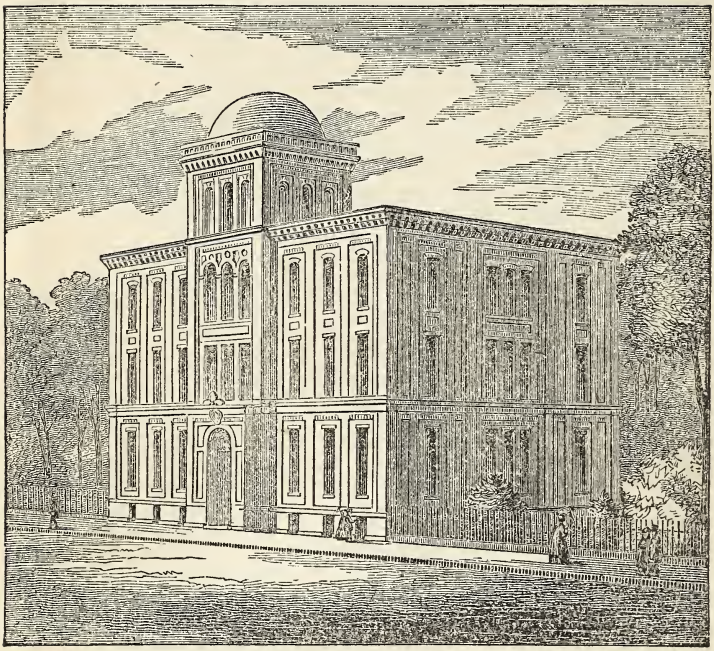


Fig. 1.—Perspective.

In 1853, a new building was erected for the accommodation of the Central High School, in Spring Garden, on the east side of Broad street. The lot is one hundred and fifty feet on Broad street, by ninety-five feet deep, having Green street for a boundary on the north, and Brandywine street on the south.

The building is constructed throughout in a substantial manner, with good materials, and with a main reference to utility rather than ornament, although the latter has not been altogether lost sight of. The walls throughout are built hollow, to prevent dampness; the outside walls and those on each side of the transverse hall have an average thickness of eighteen inches, while those separating the various class rooms have a thickness of thirteen inches. The exterior is built of the best quality of pressed brick. The plainness of the extended façade is relieved by projections and recesses in the line of the outer wall, by a horizontal line of marble work separating the first story from those above, by a large main entrance in the middle, by the cornice, and by the dome of the observatory above. Though simple in design, and constructed in an economical manner, the building presents externally quite an ornamented appearance.

The observatory is built upon two piers of solid masonry. These piers stand isolated from all the rest of the structure, being inclosed within the walls on each side of the front entrance. They are sixteen feet wide by two and a half feet thick, and extend upwards, without material change, from below the foundation to the top of the third story. There they are connected by iron girders, and on these girders the instruments rest. The dome of the observatory rests upon the other walls of the building, and has no connection with the piers that are used to support the instruments. The height of the dome above the level of the pavement, is one hundred and twelve feet.

Throughout the building, careful provision has been made for light. The win-

dows are all large, and are as closely placed as a due regard to the strength of the walls would permit. Four out of six of the class rooms on each floor, are corner rooms, admitting light from two sides. The large lecture room on the first floor, is lighted on three sides.

There are two main stairways, one at each end of the large hall. That in front runs in a well, from the first floor to the arch of the observatory. That in the rear connects only the first and second stories. The building has also a double flight of stairs in the rear, connecting the main hall with the basement, a double flight of outside stairs into the basement from each end of the building, and a small stairway connecting the chemical laboratory with the class room above. The main stairways are all six feet wide, each stair having a rise of seven, and a tread of twelve inches. The door into the main entrance in front, is a folding-door, opening outwards, eight feet wide and eighteen feet high. That in the rear is also folding, opening outwards, eight feet wide and fourteen feet high. The main entrance into the lecture room is likewise a double door, seven feet wide, opening freely both ways. The class rooms are all severally connected by doors, with each other, as well as with the main hall. These doors are all three and a half feet wide. The building thus has admirable facilities for the movements of the classes, as well as for being instantly cleared in case of panic.

The general plan of the building is exceeding simple. It is in shape an oblong parallelogram, fronting lengthwise on Broad street, being one hundred feet long by seventy-two deep. There are three stories besides the basement. The plan in each story is nearly the same. A hall, sixteen feet wide, runs east and west, dividing the building on each floor into two equal parts; these parts are again severally subdivided by walls running north and south, into three rooms, averaging thirty-eight feet by twenty-two. This gives six rooms on a floor, except on the first floor, where the whole of the north side is reserved for a lecture-room. There is also an additional small room in the third story, occupying the space in the hall over the rear stairway. The lecture room on the first floor is sixty-eight feet long by thirty-eight feet wide, and twenty feet high, and is capable of seating eight hundred persons.

The height of the several stories, in the clear both of the floor and the ceiling, is as follows: the basement story ten feet; the first story twenty feet three inches; the second story sixteen feet six inches; the third story sixteen feet. The basement in front is five feet three inches above the level of the curbstone; and, as the lot descends considerably in the rear, the basement is, on an average, more than one-half above ground. It is divided into six rooms, with a transverse hall, on the same plan as the stories above, the rooms being intended for a chemical laboratory, clothes room, wash room, storage, &c.

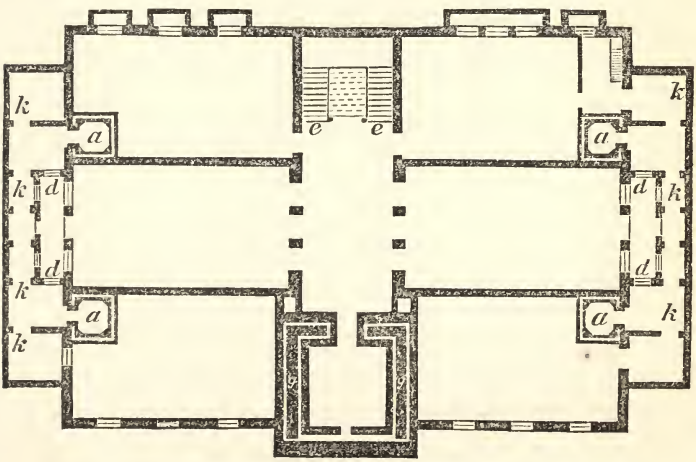


Fig. 2.—Basement.

In regard to the important matter of heating and ventilation, two methods engaged the attention of the controllers. The first was, to generate all the heat in one large chamber in the center, and send it thence, north and south, to the ends of the building. The objection to this plan was the difficulty of producing, in connection with it, a proper ventilation. To secure good ventilation in an apartment, it is necessary to establish a current through it. The air must be brought in at one end and carried out at the other end. The ventiducts for carrying off the air, after it has been used, must be, as nearly as possible, opposite to the warm flues by which the pure air is introduced; consequently, if the hot air chamber were placed in the centre of the building, the ventiducts would have to be in the extreme ends. But the end walls, in a building standing apart from others, and en-

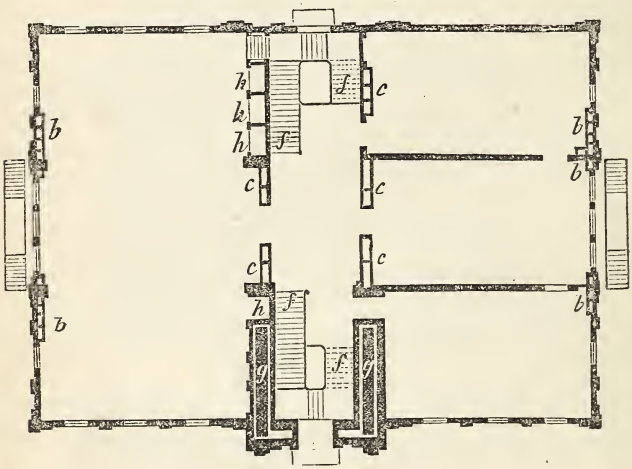


Fig. 3.—First Floor.

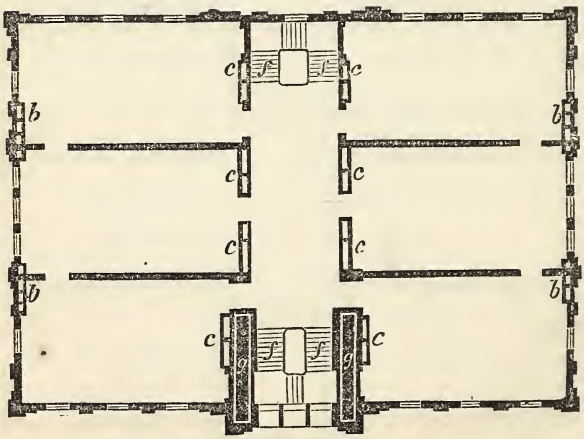


Fig. 4.—Second and Third Floor.

tirely exposed to the external atmosphere, are naturally colder than those in the center; they would consequently chill the ventiducts, and thereby greatly impair their efficiency in carrying off the foul air.

Besides this, in order that the ventiducts may be perfectly reliable in all weathers, it is necessary that some artificial means should be used for increasing the current by rarefying the air within them. This is ordinarily done by introducing, within the ventiduct, a jet of burning gas, or a small stove. The trouble and expense of such an apparatus is greatly increased by multiplying the number of places where it must be applied. It was, therefore, very desirable, that the ventiducts should be all brought together into one general tube before going out of the roof. One good fire maintained within it would then suffice for the whole building. But this arrangement would be impracticable if the warm-air flues were to radiate from the center, and the ventiducts be placed at the extremities.

It was, therefore, determined to take the other method, namely, to centralize the ventilating apparatus, and generate the heat at the extremities. This is done by four of the largest size furnaces, two being placed at each end of the building, and the heat sent inwards towards the center. This is indicated by the position of the hot air flues, which are all placed in the north and south walls of the several apartments. The ventiducts being at the opposite ends of these apartments, all occur in the walls that line the central hall, and are all brought together into one large tube or duct in the loft. This tube, which is about seven feet in diameter, is equal in capacity to that of all the separate ducts combined. It passes out ten feet beyond the roof, and is surmounted by one of Emerson's ventilating caps, with a disc of about ten feet diameter. Into this large tube or chamber, just below the roof, a coal stove is introduced, by which a large amount of hot air may be generated, and an impetus may be given to the ascending current to any extent that is desired.

This part of the arrangement is deemed especially important. In clear, cold weather, when the furnaces are in action, and a current of warm air is constantly setting into one extremity of an apartment, it is not difficult to establish and maintain an ascending exit current from the other end. The air is forced into the ventiduct by the constant pressure from the other end. Moreover, it enters the ventiduct already warmer than the external air. The ventiduct itself becomes warmed; and so the current, once established, perpetuates itself. But when the furnaces are not in operation, nothing of this sort takes place. And yet, this occurs precisely in those parts of the year, when ventilation in a school-room is most needed, viz.: in moderate weather, when it is not warm enough to open the doors and windows, and yet not cold enough to maintain a fire. At such times, the stove in the loft, acting directly and powerfully upon the ventiduct, will at all times create an ascending current, sucking the foul air up, as it were, from the several apartments, and thereby causing fresh air to enter from the other extremities. The position of the windows, directly opposite the ventiducts, gives a special facility for this purpose, when the furnaces are not in action. The windows, at such times, take the place of the warm air flues in supplying a stream of fresh air.

The following additional particulars may be mentioned in regard to the apparatus for heating and ventilation. The flues are all made large, both those for the admission, and those for the exit of the air. The dimensions of the several ducts are given in the engravings. In the large lecture room, the two warm air flues have together a capacity of about six square feet; and the two ventiducts for the same have, together, a capacity of twelve square feet. In the class-rooms, which are thirty-eight feet by twenty-two, the warm air flues average one and one-sixth square feet, and the ventiducts two and one-third square feet. In all the rooms, the warm air is introduced at the bottom of the apartment, as near as possible to the level of the floor; and the ordinary opening for the escape of the foul air is also on the level with the floor, at the opposite extremity, so as to sweep constantly the lower stratum of air, in which the pupil is immersed. The ventiducts are also supplied with openings at the ceiling, to be used, not in ordinary, but whenever needed, to get rid of excessive heat. In reckoning the advantages of the building, in respect to pure air, especial emphasis should be given to the commendible height of the ceilings. Each apartment has a large volume of air at its disposal, in proportion to the area of its floor; and it is obvious, that the air of a room eight or ten feet high, is much more rapidly vitiated than that of one fifteen or twenty feet high.

Plans of City Normal School-house in Philadelphia.

The Normal School of Philadelphia was instituted in 1848, "for the thorough training of female teachers of the public schools, in those branches of a good English education, and in such practical exercises as will discipline and develop the mind, adorn and elevate the character, insure the best mode of imparting knowledge, establish uniformity in teaching, prevent fruitless experiments, manifold mistakes, and irreparable loss of time, with all their consequences to teachers and pupils." The building will accommodate 150 Normal pupils, and a School of Practice of 350 pupils, distributed in eight classes.

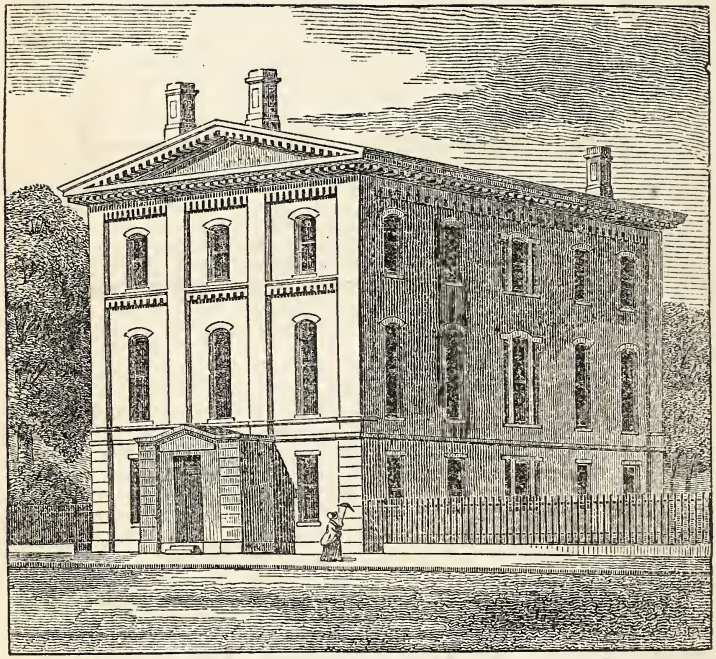


Fig. 1. Perspective.

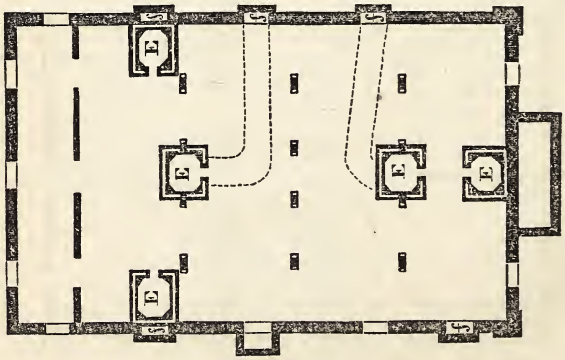


Fig. 2. Plan of Cellar.

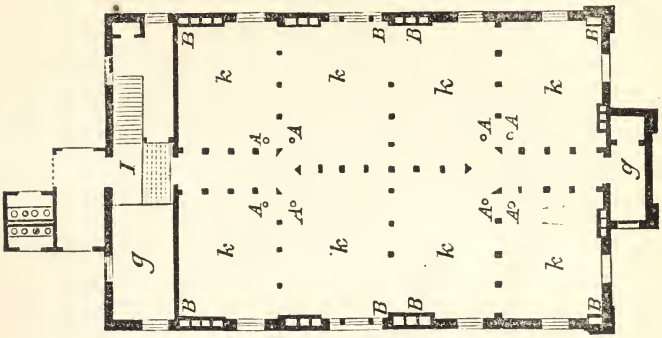


Fig. 3. First Floor.

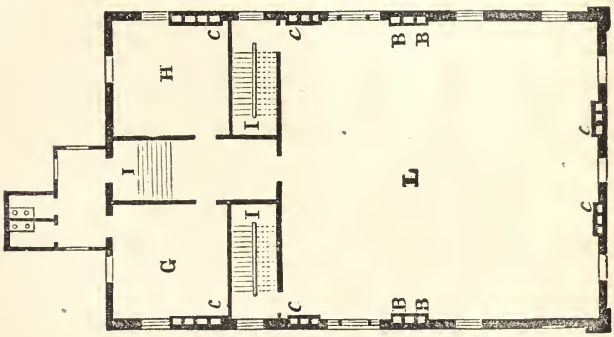


Fig. 4. Second Floor.

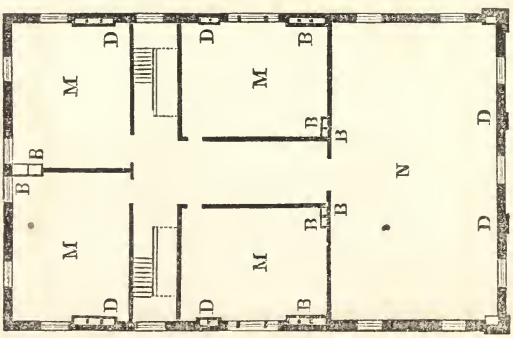


Fig. 5. Third Floor.

Dedicatory Exercises.

The opening of a new school-house is an occasion which well deserves a public and joyful commemoration. Out of it are to be the issues of life to the community in the midst of which it stands, and like the river seen in the vision of the prophet, which nourished all along its banks trees whose leaves were for the healing of the nations, the well-spring of all its influences should be a spot consecrated by religion. In prayer, and in praise to the Giver of all good, and the Author of all being,—in song, and hymn and anthem, and in addresses, from those whose position in society will command the highest respect for any object in whose behalf they may speak, and in the presence of all classes of the community, of pupils, and teachers, of fathers and mothers, of the old and young,—the school-house should be set apart to the sacred purpose of the physical, intellectual and moral culture of the children who will be gathered within its walls. We rejoice to see that these occasions are thus improved, and that so many of our most distinguished teachers, scholars and statesmen take part in the exercises. We have before us a large number of addresses, at once eloquent and practical, which have been delivered at the opening of new school-houses, and we shall select a few, not for their superiority to the rest, but as specimens of the manner in which topics appropriate to the occasion are introduced, and as fitting testimony to the importance of School Architecture.

School Celebration at Salem, Mass.

On the first of March, 1842, the occasion of occupying several new school-houses, was marked by a variety of interesting exercises, an account of which will be found in the Common School Journal for that year. We copy the addresses of Mr. George B. Emerson, and of G. F. Thayer.

Mr. Emerson said,—

"I congratulate you, my young friends, on this happy event. This pleasant day is like a smile of Heaven upon this occasion; and I believe Heaven always smiles on events like this. Many of us whom you see here have come from a distance, on the invitation of your excellent friend the Mayor, to show the interest which we feel in you, and in what has been done here for your improvement. We have taken great pleasure in looking over the buildings prepared for your use, the admirable arrangements and apparatus, so much superior to what is usually enjoyed by children in your position. We have been pleased to hear of the faithful teachers that are provided for you, and the excellent plan of your studies, and the excellent regulations.

Your fathers and friends have spared no pains to furnish you with all the best means and opportunities for learning. They now look to you to do your part. All that they have done will be of no avail, unless you are excited to exert yourselves,—to prove yourselves worthy of these great advantages.

I was gratified, in looking over the regulations, to see the course marked out for you,—to see the stress laid upon the great substantials of a good education,—to see the prominent place given to that most useful art, that

most graceful accomplishment, *reading*. You cannot, my young friends, realize the great and manifold advantages of gaining, now, in the beginning of your life, familiarly and perfectly, the single power of reading distinctly, naturally, intelligently, with taste and interest,—and of acquiring a *love* for reading. There is no situation in life, in which it will not prove to you a source of the purest pleasure and highest improvement.

For many years, and many times in a year, I have passed by the shop of a diligent, industrious mechanic, whom I have often seen busy at his trade, with his arms bare, hard at work. His industry and steadiness have been successful, and he has gained a competency. But he still remains wisely devoted to his trade. During the day, you may see him at his work, or chatting with his neighbors. At night, he sits down in his parlor, by his quiet fireside, and enjoys the company of his friends. And he has the most extraordinary collection of friends that any man in New England can boast of. William H. Prescott goes out from Boston, and talks with him about Ferdinand and Isabella. Washington Irving comes from New York, and tells him the story of the wars of Grenada, and the adventurous voyage of Columbus, or the Legend of Sleepy Hollow, or the tale of the Broken Heart. George Bancroft sits down with him, and points out on a map, the colonies and settlements of America, their circumstances and fates, and gives him the early history of liberty. Jared Sparks comes down from Cambridge, and reads to him the letters of Washington, and makes his heart glow with the heroic deeds of that god-like man for the cause of his country. Or, if he is in the mood for poetry, his neighbor Washington Allston, the great painter, steps in and tells him a story,—and nobody tells a story so well,—or repeats to him lines of poetry. Bryant comes, with his sweet wood-notes, which he learnt among the green hills of Berkshire. And Richard H. Dana, father and son, come, the one to repeat grave, heart-stirring poetry, the other to speak of his *two years before the mast*. Or, if this mechanic is in a speculative mood, Professor Hitchcock comes to talk to him of all the changes that have befallen the soil of Massachusetts, since the flood and before; or Professor Espy tries to show him how to predict a storm. Nor is his acquaintance confined to his own country. In his graver hours, he sends for Sir John Herschel from across the ocean, and he comes and sits down and discourses eloquently upon the wonders of the vast creation,—of all the worlds that are poured upon our sight by the glory of a starry night. Nor is it across the stormy ocean of blue waves alone that his friends come to visit him; but across the darker and wider ocean of time, come the wise and the good, the eloquent and the witty, and sit down by his table, and discourse with him as long as he wishes to listen. That eloquent blind old man of Scio, with beard descending to his girdle, still blind, but still eloquent, sits down with him; and, as he sang almost three thousand years ago among the Grecian isles, sings the war of Troy or the wanderings of the sage Ulysses. The poet of the human heart comes from the banks of Avon, and the poet of Paradise from his small garden-house in Westminster; Burns from his cottage on the Ayr, and Scott from his dwelling by the Tweed;—and, any time these three years past, may have been seen by his fireside a man who ought to be a hero with schoolboys, for no one ever so felt for them; a man whom so many of your neighbors in Boston lately strove in vain to see,—Charles Dickens. In the midst of such friends, our friend the leather-dresser lives a happy and respected life, not less respected, and far more happy, than if an uneasy ambition had made him a representative in Congress, or a governor of a State; and the more respected and happy that he disdains not to labor daily in his honorable calling.

My young friends, this is no fancy sketch. Many who hear me know as well as I do, Thomas Dowse, the leather-dresser of Cambridgeport,

and many have seen his choice and beautiful library. But I suppose there is no one here who knows a neighbor of his, who had in his early years the same advantages, but who did not improve them;—who never gained this love of reading, and who now, in consequence, instead of living this happy and desirable life, wastes his evenings in low company at taverns, or dozes them away by his own fire. Which of these lives will you choose to lead? They are both before you.

Some of you, perhaps, are looking forward to the life of a farmer,—a very happy life, if it be well spent. On the southern side of a gently sloping hill in Natick, not far from the place where may be still standing the last wigwam of the tribe of Indians of that name, in a comfortable farm-house, lives a man whom I sometimes go to see. I find him with his farmer's frock on, sometimes at the plough-tail, sometimes handling the hoe or the axe; and I never shake his hand, hardened by honorable toil, without wishing that I could harden my own poor hands by his side in the same respectable employment. I go out to look with him at trees, and to talk about them; for he is a lover of trees, and so am I; and he is not unwilling, when I come, to leave his work for a stroll in the woods. He long ago learnt the language of plants, and they have told him their history and their uses. He, again, is a reader, and has collected about him a set of friends, not so numerous as our friend Dowse, nor of just the same character, but a goodly number of very entertaining and instructive ones; and he finds time every day to enjoy their company. His winter evenings he spends with them, and in repeating experiments which the chemists and philosophers have made. He leads a happy life. Time never hangs heavy on his hands. For such a man we have an involuntary respect.

On the other side of Boston, down by the coast, lived, a few years ago, a farmer of a far different character. He had been what is called fortunate in business, and had a beautiful farm and garden in the country, and a house in town. Chancing to pass by his place, some four or five years ago, I stopped to see him. And I could not but congratulate him on having so delightful a place to spend his summers in. But he frankly confessed that he was heartily tired of it, and that he longed to go back to Boston. I found that he knew nothing about his trees, of which he had many fine ones,—for it was an old place he had bought,—nor of the plants in his garden. He had no books, and no taste for them. His time hung like a burden on him. He enjoyed neither his leisure nor his wealth. It would have been a blessing to him if he could have been obliged to exchange places with his hired men, and dig in his garden for his gardener, or plough the field for his ploughman. He went from country to town and from town to country, and died, at last, weary and sick of life. Yet he was a kind man, and might have been a happy one but for a single misfortune; he had not learned to enjoy reading. The love of reading is a blessing in any pursuit, in any course of life;—not less to the merchant and sailor than to the mechanic and farmer. What was it but a love of reading which made of a merchant's apprentice, a man whom many of you have seen and all have heard of, the truly great and learned Bowditch?

Our friends the young ladies may not think this which I have said exactly suited to them. But to you, my young friends, even more than to your brothers, it is important now to acquire a talent for reading well, and a taste for reading. I say *more important*, for, looking forward to the future, you will need it more than they. They are more independent of this resource. They have their shops, and farms, and counting-houses to go to. They are daily on change. They go abroad on the ocean. The sphere of woman, her place of honor, is home, her own fireside, the cares of her own family. A well-educated woman is a sun in this sphere,

shedding around her the light of intelligence, the warmth of love and happiness.

And by a well-educated woman I do not mean merely one who has acquired ancient and foreign languages, or curious or striking accomplishments. I mean a woman who, having left school with a firmly-fixed love of reading, has employed the golden leisure of her youth in reading the best English books, such as shall prepare her for her duties. All the best books ever written are in English, either original or translated; and in this richest and best literature of the world she may find enough to prepare her for all the duties and relations of life. The mere talent of reading well, simply, gracefully,—what a beautiful accomplishment it is in woman! How many weary and otherwise heavy hours have I had charmed into pleasure by this talent in a female friend. But I speak of the higher acquisition, the natural and usual consequence of this, a taste for reading. This will give a woman a world of resources.

It gives her the oracles of God. These will be ever near her;—nearest to her hand when she wakes, and last from her hand when she retires to sleep. And what stores of wisdom, for this world and for a higher, will she gain from this volume! This will enable her to form her own character and the hearts of her children. Almost every distinguished man has confessed his obligations to his mother. To her is committed the whole formation of the character,—mind, heart, and body, at the most important period of life. How necessary, then, is it that she should possess a knowledge of the laws of the body and the mind! and how can she get it but by reading? If you gain only this, what an unspeakable blessing will your education be to you!

I need not, my young friends, speak of the other acquisitions you may make,—of writing, which places friends in the remotest parts of the world side by side,—or of calculation, the very basis of justice and honesty.

The acquisitions you may make will depend chiefly on yourselves. You will find your teachers ready to lead you on to higher studies whenever you are prepared to go.

These excellent establishments are emphatically yours. They are raised for your good; and, as we your seniors pass away,—and in a few years we shall have passed,—these buildings will become your property, and your children will fill the seats you now occupy. Consider them yours, then, to enjoy and profit by, but not yours to waste. Let it be your pride to preserve them uninjured, unmarred by the mischievous knives and pencils of vulgar children. Unite for this purpose. Consider an injury done to these buildings as an injury done to yourselves.

There is another thing which will depend on you, of more importance than any I have spoken of. I mean the tone of character which shall prevail in these schools. Your teachers will be happy to treat you as high-minded and generous children. Show that you can be so treated; that you are such.

Let me congratulate you upon the happy auspices of the name of him under whom, with the zealous co-operation of enlightened and patriotic associates, this momentous change in your school system has been effected,—a name which is borne by the oldest and best school in New Hampshire, and by one of the oldest and best in Massachusetts. It will depend upon you, my friends, to make the schools of Salem, equally, or still more distinguished, among those of the State."

Mr. Thayer said,—

Children: I did not expect that I should have the privilege of addressing you, on this most joyful occasion; for it was not till I met your respected Mayor, an hour ago, at the beautiful school-house we have just

left, that I received an invitation to do so. You will not, therefore, anticipate a studied discourse, or any thing particularly interesting. Devoted, however, as my life is, and has long been, to the instruction and guidance of the young in no inconsiderable numbers, I shall, without further preface, imagine myself in the midst of my own school, and talk familiarly to you as I would, and do, to them.

And allow me to add my congratulations to those of your other friends for the ample, beautiful, and convenient arrangements that have been made for you, in the school-houses of this city; and especially in the new one we have just examined. I can assure you, it is superior in almost every respect to any public school-house in New England, if not in the United States. It, with others in the city, has cost your fathers and friends a great deal of money, which they have cheerfully expended as a means of making you wise and good. But you have incurred a great debt to them, which you can never repay while you are children, but must endeavor to do it to your children, when you shall become men and women, and take the place of your parents in the world. But before that period, you can do something. Now, immediately on entering upon the enjoyment of the precious privileges extended to you, you can acknowledge the debt, evince the gratitude you feel, not by *words*, but *deeds;*—by, (to use an expression well understood by all children,) '*being good.*' Yes,—by 'being good and doing good;'—by obedience to parents and teachers; by kindness to brothers and sisters, and all your young friends and companions; by fidelity in duty, at home and at school; by the practice of honesty and truth at all times; by refraining from the use of profane and indecent language; by keeping the mind and heart free from every thing impure. These are the means in your own hands. Fail not to use them; and although they will in fact be merely an acknowledgment of your obligation for the boon you possess, your friends will consider themselves well repaid for all they have done for you. It is from such conduct that the teacher's, as well as the father's, richest reward and highest satisfaction are derived. To see the beloved objects of our care and instruction appreciating our labors, and improving in all that is good and useful, under our management, affords the greatest happiness, lightens the heavy load of toil, relieves the aching head, and revives the fainting spirit.

There is, however, one great danger to which you,—to which all the young,—are especially exposed. I mean the influence of bad example. Example is omnipotent. Its force is irresistible to most minds. We are all swayed more or less, by others. Others are swayed by us. And this process is continually going on, even though we are entirely unconscious of it ourselves. Hence we see the importance of choosing good companions, and flying from the bad. Unless this is done, it will be in vain for your friends to give you wise counsel, or for you to form good resolutions. 'Who can touch pitch and be clean?' You will resemble those with whom you associate. You will catch their words, their manners, their habits. Are they pure, you will be pure. Are they depraved, they will corrupt you. Be it a rule with you, then, to avoid those who are addicted to practices that you would be unwilling your most respected friends should know, and regulate your own conduct by the same standard.

I would particularly caution you against *beginnings*. It is the *first step* that is the dangerous one; since it is obvious that, if you were to ascend the highest mountain, it could only be done by a step at a time, and if the first were not taken, the summit could never be reached. But, one successfully accomplished, the next follows as a matter of course. And equally and fatally sure is the *downward* track to crime and misery! If we suffer ourselves to be drawn in *that* direction, what human power can

save us from destruction? This danger, too, is increased by the feeling of security we indulge, when we say, 'It is only a *little* thing; we shall never commit any great fault;'—not remembering that nothing stands still in life, in character, any more than in the material universe. We must be going forward or backward; up, towards improvement and glory,—or down, towards infamy and woe! Every thing accumulates, according to its kind; though it begins small, like the snowball you hold in your hand, it becomes, as you roll it on the ground before you, larger at every revolution, till, at last, it is beyond your power to move it at all.

I will illustrate this by a sad case which has recently occurred in Boston. But first, I wish to interest you in something of an agreeable nature, in connection with the faithful performance of duty.

I have spoken of some things that you should do, to show your sense of the benefits which have been conferred upon you, and I should like to dwell on each one of them separately; but I shall have time only to speak of one. It is, however, among the most important. I allude to *speaking the truth*,—the most substantial foundation of moral character. It has innumerable advantages, one of which is strikingly exhibited in the following story: —

Petrarch, an eminent Italian poet, who lived about five hundred years ago, secured the confidence and friendship of Cardinal Colonna, in whose family he resided in his youth, by his candor and strict regard to truth.

A violent quarrel had occurred in the family of this nobleman, which was carried so far, that resort was had to arms. The cardinal wished to know the foundation of the affair; and, calling all his people before him, he required each one to bind himself by a solemn oath, on the Gospels, to declare the whole truth. None were exempt. Even the cardinal's brother submitted to it. Petrarch, in his turn, presenting himself to take the oath, the cardinal closed the book, and said, '*As for you, Petrarch, your* WORD *is sufficient!*'

What more delightful reward could have been presented to the feelings of the noble youth than this, from his friend, his master, and one of the highest dignitaries of the church? Nothing but the peaceful whispers of his own conscience, or the approbation of his Maker, could have given him more heart-felt satisfaction. Who among you would not be a Petrarch? and, in this respect, which of you could not?

While, then, I would hold up for imitation this beautiful example, I would present a contrast as a warning to you.

There is now confined in the Boston jail a boy of fourteen years of age, who, for the previous six years, had been sinking deeper and deeper into vice and crime, until last October, when he was convicted, and sentenced to two years' confinement within the cold damp cell of a gloomy prison, for aggravated theft. In his own written account of his life, which I have seen, he says that he began his wretched course by playing truant from school. His second step was *lying*, to conceal it. Idle, and destitute of any fixed purpose, he fell in company with others, guilty like himself, of whom he learned to steal, and to use indecent and profane language. He sought the worst boys he could find. He became a gambler, a frequenter of the circus and the theatre, and engaged in various other corrupt and sinful practices. At length, becoming bold in his dishonesty, he robbed the post-office of letters containing very considerable sums of money, and was soon detected and condemned. If you were to visit that abode of misery, you might often see the boy's broken-hearted mother, weeping, and sobbing, and groaning, at the iron grating of his solitary cell, as if she would sink on the flinty floor, and die! 'And all this,' (to use the boy's own words,) 'comes from playing truant!'

Look, then, my young friends, on these two pictures,—both taken from life,—and tell me which you like best; and which of the two characters

you propose to imitate. Will you be young Petrarchs, or will you adopt the course of the unfortunate boy in Boston jail? They are both before you. If you would be like the former, *begin right.* Resist temptatior to wrong-doing, with all your might. Let no one entice you from the way which conscience points out.

This precept is applicable to all,—to both sexes and every age. Let me, then, I pray you, when I shall inquire, hereafter, respecting the habits and characters of the children of the Public Schools of Salem, have the satisfaction to hear, that the instructions of this occasion made an impression on their minds favorable to truth and duty, which subsequent time could never efface.

Dedication of the New School-house in Pawtucket, October 31, 1846

Address of President Wayland, of Brown University.

Ladies and Gentlemen,

There is something deeply interesting, both to the philanthropist and to the political economist, in the appearance of such a village as this, the abode of wealth, civilization and refinement. We find ourselves, as we look upon it, unconsciously reverting to the period, not very remote, when this whole region was a desert. Thick forests covered all these hills, and pressed down even to the water's brink. This river rushed over its rocky bed, or tumbled down its precipitous ledges, unnoticed by the eye of civilized man. A few savages from time to time, erected their transient wigwams upon its banks, as the season of hunting or fishing attracted them, and they alone disputed the claim of the beasts of the forest to this beautiful domain. The products of all this region were a scanty and precarious pasturage for game, a few canoe loads of fish, and, it may be, a few hundred pounds of venison. Whatever else the earth produced, fell and perished ungathered. Age after age, beheld this annual waste. Here was the earth with all its capabilities. Here were the waters with all their unexpended powers. But here was no man whose intellect had been instructed in the laws of nature. Here was neither continuous industry, nor even frugal forethought. Hence there could be no progress All things continued as they were from the beginning of the creation.

About two hundred years since, the first civilized man cast his eyes over this beautiful landscape. He brought with him the arts and the science of the older world, and a new era commenced in the history of that part of our country, since known as Rhode Island. The labors of agriculture soon began to work their magic changes. The forest was felled, the soil was tilled, and, in the place of the precarious products of the uncultivated field, rich harvests of grain waved over these plains. The beasts of the forest retired, and the animals given by the Creator to aid us in our toil, occupied their place. Instead of the graceful deer, the clumsy moose, the prowling wolf and the ravenous panther, these fields were covered with the lowing herds, the bleating sheep, the laborious ox, and the horse, in all latitudes the faithful servant of man.

This was a great and glorious transformation. From the moment that a civilized man first thrust his spade into this earth, or here yoked his oxen to the plough, the sleep of ages was broken, and the reign of progress commenced. From this moment the darkness had begun to pass away, and the sun was dispersing that night, which, since the deluge, ad brooded over this land. From that auspicious beginning, all the means of happiness that the eye beholds, have proceeded. Acre after

acre has been reclaimed from barrenness. Every variety of product has been tried, in order to ascertain which would be produced by the earth most kindly. The smoky wigwam gave place to the log house, and this in turn, to the convenient farm-house, or the stately mansion. And thus another portion of the earth was added to the area of Anglo-Saxon civilization.

But still the river, to which all the distinctive prosperity of this region owes its origin, ran, as it ever had ran, to utter waste. This mighty and most productive means of wealth, remained wholly unemployed. A mine richer than that of gold, was yet unwrought. It was a mine of *mechanical power*, instead of *metallic treasure*, and let me add, a mine of incalculably greater value. At last it was discovered, that this little river, falling over its innumerable ledges, could do the labor of many thousand men. An accomplished manufacturer,* from England, whose name has made this village one of the most renowned spots in our country, came among us, and applied the power of this water-fall to the spinning and weaving of cotton. Who can measure the results of this one grand experiment? We hear of battles and sieges, of the defeat of armies, the capture of towns, the destruction of fleets; but what achievement of war was ever of such importance to a people, as that which was accomplished, when that wheel made its first revolution, and the first thread of cotton was here, in this very village, spun by water power? From this moment may be dated the commencement of general manufactures in this country, and that of cotton in particular. From that moment, every fall of water throughout our land became a most valuable possession. From that moment, this noble natural agent began, everywhere, to fabricate garments for our people. From that moment all the labor, of every age, throughout New England, could be profitably employed. From that moment it was certain that capital to any amount could readily find investment. The rich proceeds of one manufactory laid the foundations of a similar one by the side of it. As one branch of manufactures began to supply the demand of the nation, another branch was established. Thus we are every year adding millions to this form of investment, and employing additional thousands of hands in this mode of industry. We are entering into generous and successful rivalry with the nations of Europe. Already many of our cottons are preferred to theirs in the markets of the world. Soon, other branches of our manufactures will be brought to equal perfection. Nay, I anticipate the time when we, in this country, under a system of generous reciprocity, shall supply the continent and England herself with all those articles, for the fabrication of which we have special advantages.

But this chain of events by no means ceases here. Year after year every branch of manufactures is increasing its means, and distributing the proceeds of its labor over every part of our land. Wherever a fabric is sent, it is exchanged, in some form, for the productions of that region in which it is consumed. The common means for accomplishing these mutual and increasing exchanges, soon became utterly inadequate; more efficient modes of transportation must, from necessity, be invented. The business of the country could not be carried on without them. Our manufacturing prosperity, while it creates the necessity for internal improvements, also supplies the means for constructing them. The annual gains of manufacturing capital are next invested in canals and railroads, and thus the means of transporting these fabrics at the least cost, are at once

* Mr. Slater has even a higher claim to the gratitude and veneration of this country, than that which he derives from the introduction of the cotton manufacture. He established in Pawtucket the first SUNDAY SCHOOL that was ever opened in America; and for some time sustained it wholly at his own expense.

provided. Here is, then, another mode created, of advantageous investment. By means of internal improvement, the market of every producer is indefinitely extended, he also receives a fair remuneration for this very investment, by which his market is thus extended, and, at the same time the consumer receives whatever he purchases at a cheaper rate and in greater perfection. Thus, as we always observe, under the government of God, a real benefit to one is a benefit to all. And hence we learn, that to attempt to secure exclusive advantages to ourselves, is always abor lost. Nothing can be a real benefit to us, that is not a real benefit also to our neighbors.

And the illustration of all that I have said, is manifest every where around us. We behold how every other art has clustered around the art of transforming cotton into clothing. We see how one establishment has been the seed that has produced a multitude of those that resemble it. You see how manufactures have given rise to internal improvements; how the spindle has cut through the mountains, and filled up the valleys and graded the road, and stretched from city to city the iron rail. You see how loth these inseparable friends are to be parted from each other. The region of manufactures is the region of railroads. And you perceive, as the iron road that passes through this village, pursues its way toward the west, how it winds along through the valley of the Blackstone, greeting every village and waking every hamlet to renewed activity.

All this you readily perceive. You must be astonished yourselves, when you reflect upon the amount of capital which a single life time has added to the resources of this village, and the country in its immediate vicinity. But while we exult in the large measure of prosperity with which a bountiful Providence has endowed us, it may not be uninstructive to inquire, in what ways have these blessings been improved? Has it ever occurred to you, that almost all this capital has been invested in procuring for ourselves, the means of *physical* happiness? We erect houses, and we render them spacious, warm, and commodious. We furnish them with every means of physical luxury. We spread carpets for our feet. We stretch ourselves on couches of down. We temper the atmosphere at our will. We clothe ourselves with vestments wrought in every clime, and by people of every hue and language. We vary our dress with every fashion. We load our tables with luxuries imported from the tropics or the poles; we vex sea and land for new viands to stimulate our palates, already saturated with abundance. We please ourselves with every form of equipage, and tax the ingenuity of every artisan, that we may be enabled to roll from place to place without the fatigue of motion. But why need I proceed to specify any further. We all perceive, on the least reflection, that it is in expenditures of this kind, that almost all the expenses of living are incurred.

But if this be true, must there not be some grievous error in the principles of our conduct? Can this be a wise mode of expenditure for intelligent and immortal beings? In all that I have here recited, is there any thing in which, on principle, we have excelled, (excuse the homeliness of the illustration,) the *Beaver* that once inhabited these streams? The thoughtful animal expended all the treasures of his intellect or instinct, in rendering his dwelling commodious; and he accomplished it. Have we not done precisely the same thing? Has not all the expenditure of which I have spoken, been consumed for the convenience of the physical, the perishable, the material? Might not all this have been done, had we no consciousness of an immortal spirit?

But God has made us immortal. He has given to us a spiritual existence. Each one of us possesses a priceless mind. We are endowed with reason to discover truth, imagination to form conceptions of the beautiful

and the grand, taste to delight in all that is lovely or glorious, and conscience by which we are allied to God the Father of all, and the holy and blessed throughout the universe. It is by the possession of these powers, that man claims precedence over the brute. It is by the cultivation of these, that we have become more powerful than the savage, who once dwelt where we now dwell. It is by the use of these powers, that all the wonders of art have been wrought, which we now behold around us. If such be the fact, it must certainly be true that this, the spiritual part of man, is by far the most deserving of attention, and that, in the cultivation of this portion of our nature, we can in the most appropriate manner invest our capital.

But while this is evident, does our practice correspond with these well established principles? We liberally expend our substance to preserve our bodies in health, and to cultivate in our children the full development of every power, and the outward manifestation of every grace. But do we bestow proportionate labor in developing every spiritual faculty, and protecting the immortal part from the spreading contagion of evil example, and the wasting results of evil habit? We expend whatever is necessary in furnishing our tables with every thing that may be desired for the sustentation of the body. Where is there the man among us, who would not blush to be considered an illiberal provider for the wants of his household? but is any man ashamed to confess, that he has made no provision for the spiritual appetites of his children? Who of us would permit tainted or unwholesome food to be brought into his house, or placed upon his table? and yet is not intellectual food of the most questionable character, daily read in the houses of many of our most excellent citizens? Who is ashamed to declare, that he has no library in his house, or that, he has never taken the pains to inquire whether the books that are read by his family, are useful or deleterious?

But this is not all. We know that the youthful mind is destitute of knowledge, and that it is strongly predisposed to the formation of improper habits. Every one knows that a child needs instruction, and that the labor of giving it instruction should be devolved upon those only, who are intellectually and morally qualified to impart it. The parent can rarely do this for himself. The principle of division of labor teaches us, that it can be much more successfully done by some one who will devote his whole attention to it. But, now, let us look over our own neighborhoods, and observe how very small, until quite lately, has been the amount of capital devoted to the education of our youth. Compare it with almost every other form of investment, and you at once perceive how small is its relative amount. Take, for instance, the railroad which passes within a stone's throw of the place in which we are assembled. Many of you and your fellow citizens, subscribed for its stock. You did wisely. It will, I presume, raise the value of every form of property here. Land will sell for a better price. You will thus become directly connected with the whole of the South, and with the whole of the East and West; and you can, at very little expense of transportation, exchange productions with the remotest extremities of our country. This is certainly an improvement upon your former means of communication, and you are willing to invest your capital in the effort to secure it. But suppose you had been assessed to an equal amount, in order to provide the means of education; suppose you had been called upon to subscribe the same sum in aid of an effort to give to the youth of this village the best education in New England, would you not have considered the demand excessive? Would you have believed that you could possibly have paid it? Yet, I ask, is not the education of your children as important an object as the improvement of your means of transportation? Suppose you were to unite in such an effort, would not the amount of

which I have spoken be sufficient to accomplish the result, the giving to your children the best education in New England. Is it not evident, then, that we bestow upon the means of education, an attention very much less than they deserve?

I have spoken in this manner as though I were addressing you in particular. But this is not what I intend. I speak of the amount of attention which, until lately, has been given to this subject, here in this State, and throughout New England. I know as well as you, that you have not been specially behind hand in this matter. You have always been prepared to do your part, in every effort to improve the condition of education amongst us. I have, however, alluded to these facts and have presented these parallels, that you may be enabled to judge of the degree in which we have erred, in estimating the proportion of our income which is due to the cause of education.

I greatly rejoice, however, that indications of decided improvement in this respect, are visible every where around us. In Massachusetts, for several years past, no subject has appealed with greater success to the enlightened public opinion of her citizens. One of her most gifted and eloquent sons has consecrated his life to this noble cause, and the results of his efforts have become every where apparent. Nor have we of Rhode Island been wholly wanting to ourselves in this good work. Although for many years the people were indifferent to their true interests in this respect, yet, when they came to its importance, they pursued it with a manly steadfastness and a far-seeing liberality, which would do honor to any community in our country. The school system of Providence is acknowledged to be second to none in the land, in excellence and efficiency. The people in all our districts, agricultural and manufacturing, are seeking to know the best means of promoting the thorough education of their children; they are building school-houses on the best models that can be presented to them, and are raising money, with annually increasing liberality, for the purpose of accomplishing these results most perfectly.

It gives me great pleasure, Ladies and Gentlemen of Pawtucket, to be a witness to the enlightened zeal which you have manifested on this subject. From this village, first went forth the impulse which called into existence the most important manufacturing interest in this country. It is meet that as you have taught us how to supply our external, you should teach us how to supply our internal wants. You have taught us how we may clothe our bodies, it is well that you should teach us how to cultivate, and strengthen, and ennoble our minds. You have intended to render this school-house a model for your fellow citizens throughout the State. It is a noble and patriotic emulation, and we thank you for it. We hope that every village and district in the State will imitate your example.

I am delighted to observe that, in all your arrangements, you have in this matter acted with wise and thoughtful liberality. Instead of putting your school-house out of sight, in an inconvenient and unhealthy position, you have placed it on an eminence, in a desirable locality, and have determined to surround it with ample play-grounds. The building itself is exceedingly pleasing in its external proportions, and forms one of the most agreeable ornaments of your village. You thus associate education in the mind of the young with every thing gladsome and alluring; while, at the same time, you testify to your children, the importance which you attach to their intellectual cultivation.

The apartments of your house are large and convenient. The desks are constructed upon the most improved models, and the seats seem to me durable and neat, and, at the same time, comfortable to the pupil. Every thing in the school-rooms has the air of finish and completeness. The arrangements for illustration, by the blackboards, are, and I presume

that those by every other means will be, ample. With such instructors as you have appointed, seconded by your own zealous and untiring efforts, I have no doubt that this school will be all that you desire to make it, one of the first model schools of New England.

But I perceive that your forethought has gone farther. You have determined that other habits, besides those of the intellect, shall here receive their appropriate share of attention. You have provided for each scholar an exclusive place for his own hat and outer clothing. You have furnished your apartments with convenient wash-rooms, an improvemen which I do not remember to have seen in any other school-house. Thus you have made it necessary for each scholar to cultivate habits of order and cleanliness. In all these respects, I do not see how your arrangements could be better made, or how any thing else could reasonably be desired.

How delightful an object of contemplation is such a school as this, when faithfully and zealously conducted. Here the slumbering germs of intellect will be quickened into life. Here talent, that would otherwise become torpid from inaction, will be placed upon the course of indefinite improvement. Here, the rough and uncultivated, arrested by the charms of knowledge, and allured by the accents of kindness, will lay aside their harshness, and assume the manners of refinement and good breeding. From hence the lessons of knowledge and the habits of order will be carried to many a family, and they will there awaken a whole circle to a higher and purer life. In a word, take the five hundred children, whom this building will accommodate, and suppose them destitute of the knowledge, the discipline and the manners, which this school will confer; trace their course through life in all its vicissitudes, and observe the station which each of them must occupy; and then, suppose these five hundred children imbued with the knowledge which you here are prepared to give, and the habits which you intend to cultivate, and follow them through life, and observe the stations which you have qualified them to occupy; and you have the measure of good which, year after year, you are accomplishing by the establishment of these means of instruction. Look at the money that it costs. You can calculate it to a single cent, both the principal investment and the interest which it would yield. But can you estimate the intellectual service, and moral advantages which will accrue to you and your children, by this expenditure? The one is to you as the small dust of the balance. Were it all lost, you would hardly think of it. You would not think it worth while to smile at a man, who should say, Pawtucket is ruined, for it has lost a sum equal to that which all its means of education have cost. But suppose that, what that sum has purchased were lost; suppose that your schools were shut up, and your whole population consigned to ignorance; that henceforth reading, writing, and all the knowledge which they unfold, should be taught or learned here no more for ever; then would Pawtucket in reality be ruined. Every virtuous and intelligent family would flee from your border, and very soon your name would be an opprobrium to New England. I ask, then, in view of all this, is there any money which you invest, that brings you in so rich a revenue, as that which you devote to the cause of education?

But I ought to apologize for occupying so much larger a portion of your time than I intended. I must, however, even now, break off abruptly, and give place to others who are much more deserving than myself to be heard on this occasion. I will therefore add but a single suggestion. Let this effort which you have made, be but the first step in your progress. Cultivate enlarged and liberal views of your duties to the young who are coming after you, and of the means that are given you to discharge them. A place as large as this, can perfectly well provide for all its youth of both sexes, as good an education as any one can desire.

What we are capable of doing in this respect, is so little known, that any public spirited and united population, as wealthy as this, can easily place itself in the vanguard in this march of improvement. It is in your power so to cultivate the mind and manners of your children, that wherever they go, they will take precedence of those of their own age and condition. Your example would excite others to follow in your footsteps. Who can tell how widely you might bless others, while you were laboring to bless yourselves? Are you prepared to enter upon so noble a career of improvement?

Remarks of Rev Mr. Osgood.

Mr. Osgood, of Providence, being called upon by the Chairman of the School Committee, spoke in substance as follows:

You will agree with me, friends, in deeming it a happy circumstance, that he, whose position places him at the head of the educational interests of this State, and whose name stands among the highest in the literature of our land, has favored us with his presence upon this occasion, and borne so decided witness to the importance of a far nobler popular education. After what we have heard, we cannot but recognize the common interests of all friends of sound learning, and rank the school and the university as helpers in the same good cause.

We have met to-day to consecrate this pleasant edifice to the service of popular instruction. Solemn prayer has been offered to the throne of mercy, and honest counsel has been addressed to you. This house is now consecrated as a temple of learning. Do we feel duly the significance of these exercises? Do we realize the common responsibility that we assume by participating in them? This afternoon has been spent in mockery, unless the parties here represented entertain and carry out serious convictions of duty.

Let us feel that in consecrating this house to the purposes of education, we consecrate it to the spirit of *order*. Without good order, education cannot succeed; and surely all will allow that good order cannot exist without the aid alike of master and scholar, parent and guardian. Let the teacher have your hearty co-operation in his endeavors to regulate his school. Let him not be left at the mercy of the unreasonable, who will call every act of discipline, tyranny; or of the quarrelsome, who will resent every restraint as a personality. Encourage in yourselves and your children the idea that good order has its foundation in the very nature of things, in the plan of the creation, and the hearts of man. There is order in God's works,—in the heavens above,—on the earth beneath. We imitate the divine mind when we strive to do our work in accordance with the best rules, and submit passing impulses and little details to a common standard of right. Let the child be taught to accept this idea, and to see in the order of the school not so much the teacher's will as the law of general good. Let this idea prevail, and a new day will come over our schools. Teachers will be more careful to place their passions under due control, by looking beyond present provocations to permanent principles; and parents and children will acknowledge the justice of proper discipline, even when its penalties fall upon themselves. Consecrating this house to education, we consecrate it then to the spirit of good order.

Akin to order is the spirit of *good will*,—that love that heightens every task, and cheers every labor. Let us feel that this building is set apart as the abode of good will. In the simple beauty of its walls, and the neatness of its arrangements, we see at once that it is intended to be a pleasant place, where the young shall come rather in love than fear. Let every thing be done to carry out this idea, and remove all gloom from the work that here is to go forward. Let the voice of music be heard in the

intervals of study, and charm away weariness and discontent. Let courteous manners prevail between scholars and teachers. Let the law of love be supreme, and the good of each be regarded as the good of all. Let every thing be done to make knowledge attractive, without impairing its solidity. You have declared your principles upon this subject in the very structure of this edifice; virtually acknowledged the relation of the beautiful to the true, and applied to education that law of attraction that pervades all the plans of Divine Providence. Carry out these principles without fear and without extravagance. Let not your care be given merely to make your dwelling-houses attractive. Let there be no more school-rooms so rude and uncleanly as hardly to be fit to shelter well-bred cattle. Let children learn neatness, taste, and refinement, along with their alphabet and multiplication table. To good will, under every one of its attractive agencies, this house should be devoted.

Thus devoted, it will be a nursery of good works. *Utility* will go hand in hand with *good order* and *good will.* In this community, practical industry is the ruling power; utility is the prevailing standard. See to it that this standard is rightly adjusted, and that we do not confine our idea of usefulness to worldly or material interests. As we hear the sound of the spindle and the anvil, and see the spray of the waterfall, and the smoke of the furnace, let us rejoice at the large measure of enterprise and prosperity that have been granted us. But when we turn away from these things to look upon this house of learning, let us not think as some base souls do, that we have left utility behind, and are dealing only with what is visionary and unsubstantial. Next to the church of God, let us feel that the school-house is the most useful building in the community, and that from it should emanate the knowledge, principles, and habits that are to give life its direction and efficiency. Reckon in your estimate of the best wealth of your city, your schools, and, without them, regard all other wealth as disgraceful covetousness or mental poverty.

Let the idea of utility preside over the direction of this school, and all its studies tend not to fill the memory with loads of words, but to strengthen the mind, and invigorate and regulate the will and all the active powers.

Standing as it does in so sacred a seat of manufacturing industry, this house has a peculiar significance. Overlooking this prosperous town, it serves to express a generous creed—to say as if it were:—"We, the people of North Providence, think much of the importance of industry and wealth, but we think that some other things are of still greater importance, and however remiss in duty we may have been in time past, we mean to practice upon a more generous system, and this fair temple of learning, standing so far above the factory and workshop, is a substantial testimonial of our determination."

It is an interesting fact, that the first movement in this State in behalf of popular education was made, not by professional men, nor by merchants, nor any of the classes that might be thought, from their leisure or literature, to advocate the claims of sound learning, but by an association of mechanics and manufacturers in Providence. I read to-day, with great pleasure, the memorial which this association presented to the Legislature, in the year 1798. I honor those men for that document. But one of the original signers now survives. Who can meet that old man without respect? Who will not honor John Howland even more for taking the lead in that memorial, than for having served under Washington at Trenton, and braved death in the battles of the revolution? Peace to his sturdy heart, and many good days yet to that stout Saxon frame!

I must cease speaking with these few words as to the good order, good will and good works, to which this house of learning is devoted. May a good providence watch over it. Imagination cannot but conjecture the

various scenes of its future history—picture to herself the groups of children who shall come to enjoy its privileges, and who in due time shall leave its walls for the pursuits of maturer life. Prophesy is not our gift, except the prophesy that calculates events by purposes and principles. Let this edifice be used faithfully for true purposes and for just principles, and its future history will be a blessed volume in the annal of your town It will tell of generations of noble men and women, who have been educated within these walls. And when this house shall have gone to dust, it will have performed a noble mission, by being the nursery of mental life that cannot die.

"Cold in the dust, the perished heart may lie,
But that which warmed it once, can never die."

Regulations of Chauncy-Hall School, Boston.

The following Regulations of one of the best conducted Private Schools for Boys in New England, will furnish useful hints to teachers in framing regulations for their own schools, especially in reference to the *good behavior* of the pupils, and to the care of the school-room, furniture, &c.

REQUISITION.

Boys are required to be punctual at school.

To scrape their feet on the scraper, and to wipe them on every mat they pass over on their way to the hall.

To hang their hats, caps, coats, &c., on the hooks appropriated to them respectively, by loops prepared for the purpose.

To bow gracefully and respectfully on entering and leaving the hall, and any recitation room when a teacher is present.

To take their places on entering the hall.

To make no unnecessary noise within the walls of the building, at any time of night or day.

To keep their persons, clothes, and shoes clean.

To carry and bring their books for study, in a satchel.

To quit the neighborhood of the school in a quiet and orderly manner, immediately after dismissal.

To bring notes for absence, dated, and signed by persons authorized to do so, and stating the duration of the absence; also, notes for tardiness, and for occasions when pupils are wanted at home before the regular hour of dismissal.

To study lessons at home, except when inconvenient to the family—in such cases to bring a certificate of the fact in writing.

To present a pen by the feather end; a knife, by its handle; a book, the right side upward to be read by the person receiving it.

To bow on presenting or receiving any thing.

To stand while speaking to a teacher.

To keep all books clean, and the contents of desks neatly arranged.

To deposite in desks all books (except writing books,) slates, pencils, rulers, &c., before dismissal.

To give notice through the school Post Office, of all books, slates, &c., missing.

To pick up hats, caps, coats, pens, slips, books, &c., found on the floor, and put them in their appropriate places.

To replace lost keys, books, &c., belonging to the school, and make good all damage done by them.

To write all requests on their slates, and wait until called.

To close desks and fasten them before quitting school for the session.

To raise the hand as a request to speak across the hall or any recitation room.

To show two fingers when a pen is wanted.

To put all refuse paper, stumps of pens, &c., in the dust box.

To be accountable for the condition of the floor nearest their own seats.

To fill all vacant time with ciphering, as a general occupation; and to give notice to the teacher, before dismissal, in case of omitting the exercise wholly on any day.

To be particularly vigilant, when no teacher is in the hall.

To promote as far as possible, the happiness, comfort, and improvement of others.

To *follow* every class-mate while reading, and correct all errors discoverer in pronunciation, emphasis, or inflection.

To point the fore finger of the left hand, at each letter or figure of the slip of copy, while writing, and the feather of the pen towards the right shoulder.

To keep the writing book square in front.

To rest the body on the left arm, while spelling, and keep the eye directed towards their own slates.

To sit erectly against the back of the chairs, during the singing lessons, and to direct their attention to the instructor.

Transferrers to show reports finished as early in the week as 3 o'clock on Tuesday, P. M.

PROHIBITIONS.

Boys are forbidden to buy or sell, borrow or lend, give, take, or exchange, any thing, except fruit or other eatables, without the teacher's permission.

To read any book in school except such as contain the reading lesson of his class.

To have in his possession at school any book without the teacher's knowledge.

To throw pens, paper, or any thing whatever on the floor, or out at a window or door.

To go out to play with his class when he has had a *deviation.*

To spit on the floor.

To climb on any fence, railing, ladder, &c., about the school-house.

To scrawl on, blot, or mark slips.

To mark, cut, scratch, chalk, or otherwise disfigure, injure, or defile, any portion of the building or any thing connected with it.

To take out an inkstand, meddle with the contents of another's desk, or unnecessarily open or shut his own.

To write without using a card and wiper.

To quit school without having finished his copy.

To use a knife, except on the conditions prescribed.

To remove class lists from their depositories.

To meddle with ink unnecessarily.

To study *home* lessons in school hours.

To leave the hall at any time without leave.

To pass noisily, or upon the run, from one room to another, or through the entries.

To visit the office, furnace room, or any closet or teacher's room, except in class, without a written *permit.*

To play at *paw paw* any where, or any game within the building.

To play in the play-ground before school.

To leave whittlings or other rubbish in the play-ground, on the side-walk, or around the building.

To go out of the play-ground in school hours.

To carry out his pen on his ear.

To use any profane or indelicate language.

To nick-name any person.

To press his knees, in sitting, against a form.

To leave his seat for any purpose, but to receive class instruction.

To go home, when deficient, without having answered to his name.

To indulge in eating or drinking in school.

To go out in class, after having been out singly; or going out singly, to linger below to play.

To waste school hours by unnecessary talking, laughing, playing, idling, standing up, turning round, teazing, or otherwise calling off the attention of another boy.

To throw stones, snow-balls, or other missiles about the neighborhood of the school.

To bring bats, *hockey* sticks, bows and arrows, or other dangerous play-things to school.

To visit a privy in company with any one.

To strike, kick, push, or otherwise annoy his associates or others.

In fine, to do any thing that the law of love forbids—that law which requires us To do to others as we would think it right that they should do to us.

These regulations are not stated according to their relative importance, but as they have been adopted or called to mind. They are intended to meet general circumstances, but may be waived in cases of necessity, by special permission, obtained in the prescribed mode.

In a Lecture on Courtesy, delivered before the American Institute of Instruction at Boston, in August, 1840, Mr. Thayer, the Principal of the Chauncy Hall School, introduced the above regulations as the topics of

his discourse. We extract portions of this admirable lecture, which may be found entire in the annual volume of the American Institute, published in 1842, and in the Massachusetts Common School Journal, Vol. II, for 1840.

Scraping the feet at the door, and wiping them on the mats. This should be insisted on as one of the most obvious items in the code of cleanliness. It is not only indispensable to the decent *appearance* of a school room, but, if neglected, a large quantity of soil is carried in on the feet, which, in the course of the day, is ground to powder, and a liberal portion inhaled at the nostrils, and otherwise deposited in the system, to its serious detriment. Besides, if the habit of neglecting this at school is indulged, it is practiced elsewhere; and the child, entering whatever place he may, shop, store, kitchen, or drawing room, carries along with him his usual complement of mud and dirt; and the unscraped and unwiped feet are welcome nowhere, among persons a single grade above the quadruped race.

I may be told, it is a matter little attended to by many adult persons of both sexes. To which I would reply, in the language of Polonius,

——— "'T is true—'t is pity;
And pity 't is—'t is true."

But this, instead of being an argument in favor of the non-observance of the wholesome rule in our schools, only points more emphatically to the duty of teachers in relation to it; for when, unless during the school-days, are such habits to be corrected, and better ones established?

I am fully aware of the difficulty of carrying rules like this into execution, even among children of double the age of those that form the schools of some who hear me; and do not forget how much this difficulty is increased by the tender age, and consequently greater thoughtlessness, of most of the pupils of the schools usually taught by females; but still, much may be done by proclaiming the rule, and placing at the school entrance one of the elder scholars, to remind the others of it, and see that it is observed, until the cleanly *habit* be established.

In the school above alluded to, the rule has grown into so general observance, that the discovery of mud on the stairs or entry leads immediately to the inquiry, whether any *stranger* has been in. For, though few carry the habit with them, all are so trained by *daily drilling*, that it soon becomes as difficult to *neglect* it, as it was at first to regard it.

Hanging up on the hooks, caps, outer garments, &c., by loops. It is not every school that is provided with hooks or pegs for children's caps, garments, &c. All, however, *should* be so provided with as much certainty as seats are furnished to sit upon. It not only encourages the parents to send the children in comfortable trim, but induces the children to take better care of their things, especially if a particular hook or peg be assigned to each individual pupil. It is one step in the system of *order*, so essential to the well-being of those destined to live among fellow-men. If dependent on the attention of mothers at home, I am aware that many children would often be destitute of the loops spoken of; but the children themselves could supply these, under the teacher's supervision; for I understand the use of the needle is taught, in many schools, to the younger pupils of both sexes, and has been found a very satisfactory mode of filling up time, which, among the junior classes, would otherwise be devoted to idleness.

The next in order is, on keeping clean the person, clothes, and shoes. This, I am aware, must cost the teacher a great deal of labor to enforce; for if sent from home in a clean condition, the chances are more than two to one, that, on reaching school, a new ablution will be necessary. And in how many families this business of ablution is rarely attended to at all, with any fidelity; and as to clean clothes and shoes, if insisted on, the answer might be in some such *pleasant* and laconic language as this: "He ought to be thankful that he can get *any* clothes, without all this fuss, as if he were dressing for a wedding or a coronation!" Still, the rule is a *good* one, and should be enforced, as far as practicable. *Water* can at least be had; and if a child seems a stranger to its application, one or two of the elder scholars should be sent out, as is the practice in some European schools, to introduce it to him, and aid him in using it. And if you can arouse him to feel some pride in keeping his dress and person clean,

and his shoes well polished, or at least, in keeping them *free of mud*, you teach him a lesson of self-respect, that may prove his temporal salvation, and bring him to be, when out of school, instead of the squalid vagrant, a companion of pilferers and refugees from justice, the incipient worthy member of society, and perhaps a benefactor of his race. It is amazing to reflect how very slight a circumstance in the life of a human being, in the early stages, sometimes casts him on that tide, which leads to glory or to infamy!

Some one of note has said, that "he considers cleanliness as next to godliness;" and I have been accustomed to look upon one, thoroughly clean in the outward man, as necessarily possessing a clean heart, a pure spirit. Whether it may be adopted as a rule of judgment or not, need not now be decided. The claims of cleanliness are, without considering the deduction as infallible, too commanding to be resisted, and should ever be maintained.

The fourth relates to quitting the neighborhood of the school, on being dismissed. This is desirable for the safety of the children; it removes them to some extent, from temptation, and aids in the fulfillment of the reasonable expectations of parents, that their children will be at home at the appointed hour. It is a practical lesson in punctuality, which, as the young come into life, will be found of great service to them. It may be ranked with behavior, and considered as among those things which constitute the character of a good child. It is especially due to the families residing in the vicinity of the school. Do what you may to prevent annoyance, it is scarcely possible for a large school to be an agreeable neighbor to families within its hearing. They are subject to its petty disturbances, in all states of health and sickness, in trouble and in joy; and are surely entitled to the relief afforded by dismissal and sending the children to their homes. Shouting, screaming, and yelling, should be prohibited, and the children directed to go away in a quiet and orderly manner. Surely, every principle of courtesy, of kindness, and good neighborhood, demands it, and should not demand in vain. Who has not waited with the operations of some of the senses suspended, for the periodical abatement of an intolerable nuisance, and *felt*, in due time, all the joy of the anticipated relief?

"Every boy to be accountable for the condition of the floor nearest his seat;" that is, he is not to allow any thing, whether valuable or not, to lie on the floor, and, consequently, every thing contemplated in the preceding rule, as far as any individual's vicinity is concerned, is taken care of, and all worthless articles likewise removed. This making committee-men of all the pupils must have a very good effect on the condition of the school room, and promote that neatness and order, which are above recommended.

The next rule requires the pupils to be particularly quiet and diligent, when the teacher is called out of the room. This I regard as of very great consequence; for it involves a sentiment of magnanimity, which it should be the aim of all guardians of the young to implant, to develop, and to cherish. Children often infringe school regulations, and much is to be overlooked in them, especially when at a very tender age. Their little minds are scarcely able to entertain, for a long time together, the influence of many rules, except under the excitement of great hope or fear; and when the teacher is *present*, they often unconsciously offend, and should be judged with clemency; but when left as their own keepers, they should be early made to understand how discourteous, how dishonorable, how base, it is to transgress the laws of the school. Each should vie with each in good example, and thus convince the instructor, that confidence reposed in them can never be abused.

The last item, under the head of Requisitions, is this: "To promote, as far as possible, the happiness, comfort, and improvement, of others." If to the few exclusively moral and religious obligations, those of *courtesy* be added, this requisition cannot fail of being observed. I say, exclusively or *strictly* moral, because the notion of courtesy hardly enters the mind, when we speak of *moral* conduct; and yet, in nearly all the minor points, and in most which affect the happiness of others, in our ordinary intercourse with them, apart from the transactions of business, it is *courtesy* that influences us most. It may be denominated the *benevolence* of *behavior*. Aware I am that a hypocrite may be courteous; and hypocrisy in a child is inexpressibly loathsome. But hypocrisy is not a *necessary* attendant on courtesy. One may be as courteous as Lafayette, and yet as pure and upright as Washington. If, then, school-boys are kind-hearted

and friendly to their mates, and evince it towards them in their manners, they will, by their example as well as by their words, fulfill the injunction of the rule.

The "*Prohibitions*" are in the same spirit as the *requisitions*, and seem to be much the same in substance, although thrown into a negative form of speech. The first is in these words: "No boy to throw pens, paper, or any thing whatever, on the floor, or out at a window or door." This refers to a *voluntary* act of the pupil,—the rule requiring boys to pick up whatever is found on the floor to those accidental scatterings, for which one would not be culpable. The prohibition is founded on that necessity for order and neatness, which must ever be maintained in a well-conducted institution, to whatever object, worthy of attention, it may be devoted. And this is urged thus repeatedly, because of the ineffable importance of *first steps*. BEGIN RIGHT, should be the motto and rallying word of every nursery and every school.

Spitting on the floor. This topic I would willingly avoid, but fidelity to my charge forbids it. The *practice*, disgusting as it is, is too prevalent in many of the families that furnish pupils for your schools, to be overlooked, or winked out of sight; and if the children could carry home new notions in regard to it, I am sure you would have furnished a good lesson to their parents.

The habits of large portions of society demand a reform. It is futile to expect any general amendment in those who have grown old in given practices; but with the children, those whose habits are, to a great extent, yet unformed, much may be done. And although the counteracting influences of home militate against your wholesome requisitions, happy is it for us, that a goodly portion of New England respect for teachers still remains, to give authority and weight to your well-founded and reasonable rules. In many, if not in most, families, of our own countrymen, the fact that the 'school-ma'am' said so, is sufficient to make the rule promulgated binding on the parents; the mother, especially, will exert her authority and influence on the teacher's side; and if the teacher possesses the qualities of judgment, discretion, a proper consideration for the circumstances of the families to which her children belong, to guide her in the adoption of her regulations, she will be able to exert a power for good, within the sphere of her daily duties, which will continue to be felt and acknowledged, long after she shall have rendered her final account.

Marking, cutting, scratching, chalking, on the school-house, fence, walls, &c., are forbidden, as connected with much that is low, corrupting, and injurious to the property and rights of others. They are the beginnings in that course of debasing follies and vices, for which the idle, the ignorant, and profane, are most remarkable; the first steps in that course of degradation and impurity, by which the community is disgraced, and the streams of social intercourse polluted. You mark the track of its subjects as you would the trail of a savage marauding party, by its foul deeds and revolting exploits; as you would the path of the boa constrictor, in its *filthy slime*, which tells that man's deadly enemy is abroad. And *we* are called on, by every consideration of duty, to ourselves, to our offspring, and to our race, to *arm* against this tremendous evil, this spiritual bohon upas, which threatens so wide-spread a moral death.

We cannot escape the evidences of this, which assail us on every hand, sometimes on the very walls of our school-houses and churches; but especially in places removed from *public* view, where the most schocking obscenity of language is displayed, to poison the youthful mind, illustrated by emblems, which, in the words of one who deeply mourns with us over the existence of this monstrous evil, this desolating curse, "*would make a heathen blush!*" These frightful assaults on decency demand reform. The deep, low murmur of insulted humanity will, I doubt not, unless this evil be checked, ascend to the tribunal of Eternal Purity, and invoke the malediction of our Judge, which may yet be displayed in the blasting of our fair land, like another Sodom! To avert so deplorable a catastrophe, let the thousands of the good and virtuous in your midst, formed into one indomitable phalanx, take the noble stand which belongs to them, and never abandon it, till the enemy be forever vanquished; forever banished from the now polluted, but ever to be cherished, land of the Pilgrims!

By these practices, the mind acquires such a hankering after, and morbid relish for mischief, that no tree, or shrubbery, or flowers, or public embellishments, or exhibitions of art or taste, however beautiful or expensive, are sacred from the marring or destructive touch. A sensibility to the beautiful needs to be cultivated among us; and may easily be done with the young, if a proper

and sincere value be placed upon it by ourselves, and the children see that our admiration is a reality. It exists much more generally in continental Europe, than in our own country. There, the decorations of public walks, parks, and gardens; the galleries of the arts, and the magnificent structures which adorn their cities, are looked at, enjoyed, admired, by all classes; and rarely, indeed, is the Vandal hand of mischief or destruction found to desecrate these monuments of a nation's refinement. But how is it with us? No sooner has the artist given the last touch to the fluted column, than some barbarian urchin chips off a wedge of it, in wanton sport. How often is our indignation excited by the painter's boy, who, as he passes the newly-erected dwelling or recently-painted wall, daubs it with his black paint-brush, for yards in length, as he saunters heedlessly along. And what more common, in almost all public buildings, in cupolas, observatories, &c., especially, for persons, apprehensive of being forgotten by posterity, than to cut out their names or their initials, as if this were their only road to immortality!

The *use of knives* is the thing next prohibited. In mere *primary* schools, this rule, and the one last mentioned, would find, perhaps, little to do. Some, however, there are, I doubt not, even in such schools, who suffer from the too free use of knives, as their forms, desks, or benches, could testify. Nothing is more fascinating to a boy than a knife. And what pleasure can there be in possessing a knife, if one may not use it? Hence the trouble occasioned by the instrument. He early learns in imitation of his *elders* if not his *betters*, that wood was made to be cut, and that the mission of a knife is, to do the work.

This topic can hardly be thought out of place, by those who will look into the recitation-rooms of almost any of our colleges, where many a dunce, unworthy of any *degree*, soon, by his dexterity in this department, lays claim to that of master of the art,—of *hacking;* "and has his claim allowed."

I have already adverted to the *whittling* propensities of our people; but, with your permission, I will add a remark or two, with a view to placing this national peculiarity in a stronger light. So proverbial have we become, among foreigners, in this respect, that, if a Yankee is to be represented on the stage, you find him with a jackknife in one hand, and in the other a huge bit of pine timber, becoming every moment smaller, by his diligent handiwork. If he is talking, arguing, or, more appropriately, if he is driving a bargain, you find him plying this, his wonted trade, with all the energy and dexterity of a beaver; and, as it was once said of an English advocate, that he could never plead, without a piece of packthread in his hands, so the Yankee would lose half his thrift, unless the knife and wood were concomitants of his chaffering. But the habit is of evil tendency, and ought to be checked. He indulges in it without discrimination, upon whatever is cut-able; and, worse than the white ant, which saws down and carries away whole human habitations, when they have become deserted, the whittling Yankee would hack your dwelling in present occupation, until he rendered you houseless. Let the mischief be checked betimes; do it at school; showing, at the same time, the uselessness, the folly, and the annoying nature, of the habit. It is not merely at home, among our own people, that it is practiced by us; but we carry it with us wherever we go, and, even among strangers, establish our New England identity by it.

The *spirit* of the school rules at which we have glanced, should be carried into every family. It is not enough to present the summary at which we have arrived; we should also insist on minor particulars, by words and actions, not at school only, but *at home*, where great familiarity produces influences unfavorable to the exercise of courtesy,—such as the closing of all doors, especially in cold weather; the doing of it gently, without *slamming;* moving quietly over the floor; abstaining from shouting, whistling, boisterous plays, wearing the hat in the house, &c. Just in proportion as such habits can be secured by *your* labors, will you bring down upon your heads the blessing of mothers, worn by care, by sickness, and the rudeness of their offspring. Powerless themselves, to produce a reformation, their gratitude to you will be sincere and heartfelt.

Children should be taught to take leave of their parents and friends, on going to school, and to offer the friendly salute and kind inquiry, on returning home. Nothing tends more to strengthen the silken cords of family affection, than these little acts of courtesy; and their influence on the observer is highly favorable to benevolent feeling. If these points are attended to in our families, they will not fail of being carried into company, where they are always a coin of sterling value.

Rules for the Care and Preservation of School-Houses.

The following provisions are included among the Regulations for the Government of Teachers and Pupils of Public Schools, adopted by School Committees in most of the towns of Rhode Island:

For Teachers:

There shall be a recess of at least fifteen minutes in the middle of every half day; but the primary schools may have a recess of ten minutes every hour: at the discretion of the teacher.

It shall be the duty of teachers to see that fires are made, in cold weather, in their respective school-rooms, at a seasonable hour to render them warm and comfortable by school time; to take care that their rooms are properly swept and dusted; and that a due regard to neatness and order is observed, both in and around the school-house.

As pure air of a proper temperature is indispensable to health and comfort, teachers cannot be too careful in giving attention to these things. If the room has no ventilator, the doors and windows should be opened before and after school, to permit a free and healthful circulation of air; and the temperature should be regulated by a thermometer suspended, five or six feet from the floor, in such a position as to indicate as near as possible the average temperature, and should be kept about 65 degrees Fahrenheit.

The teachers shall take care that the school-houses, tables, desks, and apparatus in the same, and all the public property entrusted to their charge, be not cut, scratched, marked, or injured and defaced in any manner whatever. And it shall be the duty of the teachers to give prompt notice to one or more of the trustees, of any repairs that may be needed.

For Pupils:

Every pupil who shall, *accidentally* or *otherwise*, injure any school property, whether fences, gates, trees or shrubs, or any building or any part thereof; or break any window glass, or injure or destroy any instrument, apparatus or furniture belonging to the school, shall be liable to pay all damages.

Every pupil who shall anywhere, on or around the school premises, use or write any profane or unchaste language, or shall draw any obscene pictures or representations, or cut, mark, or otherwise *intentionally* deface any school furniture or buildings, or any property whatsoever belonging to the school estate, shall be punished in proportion to the nature and extent of the offence, and shall be liable to the action of the civil law.

No scholar of either sex shall be permitted to enter any part of the yard or buildings appropriated to the other, without the teacher's permission.

Smoking and chewing tobacco in the school-house or upon the school premises, are strictly prohibited.

The scholars shall pass through the streets on their way to and from school in an orderly and becoming manner; shall clean the mud and dirt from their feet on entering the school-room: and take their seats in a quiet and respectful manner, as soon as convenient after the first bell rings; and shall take proper care that their books, desks, and the floor around them, are kept clean and in good order.

It is expected that all the scholars who enjoy the advantages of public schools, will give proper attention to the *cleanliness* of their persons, and the neatness and decency of their clothes—not only for the moral effect of the habit of neatness and order, but that the pupils may be at all times prepared, both in conduct and external appearance—to receive their friends and visitors in a respectable manner; and to render the school-room pleasant, comfortable and happy for teachers and scholars.

In the "*Regulations of the Public Schools in the city of Providence*," it is made the duty "of the principal teacher in each school-house, for the compensation allowed by the Committee, to employ some suitable person to make the fires in the same when necessary, and to see that this important work is properly and economically done;" also "for the compensation

allowed, to employ some suitable person to sweep the room and its entries daily, and dust the blinds, seats, desks, and other furniture in the same, and to clean the same once a quarter, and to see that this work is neatly and properly done."

The teachers must also "take care that the school-houses, the apparatus in the same, and all the public property entrusted to their charge, be not defaced, or otherwise injured by the scholars, and to give prompt notice to the Superintendant of any repairs and supplies that may be needed."

Practical Suggestions respecting Ventilation, Fires, Sweeping and Dusting.

The following suggestions are taken from the *Manual of the System of Discipline and Instruction for the Schools of the Public School Society of New York:*

VENTILATION.

Strict attention should be paid to all the means provided for temperature and ventilation. During the season of fires, the thermometer should be watched,—and the ventilating flues, windows, doors, and stoves, should be constantly attended to,—and every precaution taken, to give as pure an atmosphere to the school-room, as circumstances will allow. This is not only necessary, for a proper and free exercise of the physical powers,—but it will be found greatly to influence every mental exercise; for, both will partake of either languor, or vigor, according as ventilation is neglected, or duly attended to. In warm weather, the upper sashes should be down during school hours, and allowed to remain open about four inches during the night,—except, that on occasion of a storm, the windows against which it beats, may be closed. In winter, excepting when the weather is exceedingly cold and piercing, it may be of advantage to have two or more of the upper sashes down about an inch during the night; but these as well as the doors should be closed before kindling the fires. Two or more of the upper sashes should be drawn down at the end of the first half hour after opening school,—and again, for a short time at each successive half hour,—and whenever the thermometer rises to 70 degrees. At all seasons, the windows and doors should be thrown wide open for a few minutes during each recess, while the scholars are in the yard. The teacher should be careful to require all the scholars to go out, except such as may reasonably be excused on account of infirmity or sickness; and even these should be required to change their places, and to exercise themselves by walking to and fro in the school-room. At all seasons, at the close of school, all the doors and windows should be opened for a few minutes, in order that a pure atmosphere may be admitted and retained during the noon-time recess, or at night. A thermometrical diary must be kept during the winter season, and the temperature of the room noted at the opening, middle, and close, of each daily session. Further directions on this point are given in the instructions for making fires. The window-blinds and curtains are for the purpose of guarding against the sunshine, or observation from without. They should, therefore, be so managed, as only to exclude the direct rays of the sun, and kept open or shut accordingly. When required as a screen from observation, they should extend no farther than necessary for that purpose. Attention to these rules will give an air of cheerfulness within, so congenial to the young. It is important that this fact be impressed on all—that air, and light, are grand essentials in a school-room: let the first be freely admitted, and the second never causelessly excluded.

FIRES.

The ashes should be taken from the stoves in the morning only, leaving a layer of one inch in depth: then to proceed to build with the materials after the following manner: Place one large stick on each side; in the space between them, place the kindling wood; and above it, the small wood, somewhat crosswise; then, set fire to the kindling, and close the stove door. See that the

draught is cleared of ashes, or other obstructions; and that the dampers are properly adjusted; (these are generally so arranged as to open the draught when the handle is parallel with the pipe). If the materials have been laid according to the foregoing directions, the combustion will be free. Should the temperature of the room be as low as 40°, fill the stove with wood. Under ordinary circumstances, in thirty-five minutes the temperature will be raised to 60 degrees,—at which point it should certainly be, at the time of opening school; when the stove may be supplied with one or two large sticks. At all times, before supplying wood, draw forward the brands and coals with the fire-hook. If there should be too much fire, open the stove door, and if necessary, turn the damper,—or, what may be better for economy, effectually close the draft at the stove door with ashes. By attention to all these directions,* the temperature may be maintained, the wood entirely consumed, and the thermometer stand at 60 degrees, at the close of the school; which is desirable in cold weather, so as not to subject the pupils to too sudden a change of temperature on going into the open air. The evaporating pan should be kept *clean*, and filled with water when in use. In damp rooms it is not needed,—nor in damp weather:—but it should be emptied, and wiped dry, before it is set aside.

DUSTING AND SWEEPING.

For a large room, or one department of a Public School building, six brooms will be found sufficient to be in use. When half worn, they will serve for sweeping the yard; and when well worn down in that service, will still be useful for scrubbing, with water or sand; and, if properly used by the sweepers, will be evenly worn to the last. Before sweeping, pull down the upper sashes, and raise the under ones. Let the sweepers be arranged, one to each passage between the desks,—and, beginning at the windward side, sweep the dirt before them, till it is carried forward to the opposite side of the room. The broom should rest square on the floor, and, with the motion used in raking hay, should be drawn towards the sweeper, without flirting it outwards, or upwards, which raises unnecessary dust, and wears the broom irregularly. The dirt, when taken up, should be carried into the *middle of the street*. The dusting is to be done in the same regular manner, allowing a suitable interval after sweeping. If at noon, dusting should be done shortly before school time; if at night, dust the next morning. In out-door sweeping, the same rule is to be followed—the sweepers going in ranks, and sweeping from the windward. Let the scrubbing be done by a similar method. When once acquainted with these methodical plans, the cleaners will do the work, not only more effectually, but with more satisfaction and ease to themselves—and being a part of domestic economy, it will be, so far, an advantage to understand how to do it well.

Although not strictly within the design of this work, but as closely connected with habits of neatness and order, we insert from the Manual quoted above, the following directions for delivering, holding, and returning a book.

The Manual is soon to be enlarged, and well deserves a place in every teacher's library, although it has special reference to the organization and system of instruction adopted in the schools of the Public School Society.

* From a return recently made out respecting the quantity and cost of fuel used in the different schools of the Public School Society, it appears that the average cost of wood for a house like No. 17, (plans and description of which may be seen on p. 100,) having 13 stoves, including cartage, sawing, carrying in and piling, is $160. The lowest cost is $141, and the highest, $200. In a Primary house, (like that described on page 103,) having four stoves, the average cost is $33; the highest being $40, and the lowest $25. The difference in the cost is mainly to be attributed to the difference in the care and oversight of the fire by the teacher.

With a view of correcting the evil, the committee having charge of this business have prepared a table which exhibits at one view the quantity of wood furnished to each school, so as to enable every teacher to compare himself with every other in this particular.

The cost of heating a Primary building of the same size, by wood in a furnace, is $75, and of Ward school building, of the same size as No. 17, by coal in a furnace, is $260.

Book Manual.



The pupil should stand erect,—his heels near together,—toes turned out,—and his eyes directed to the face of the person speaking to him.

Figure one represents the Book Monitor with a pile of books across his left arm, with the backs from him, and with the top of the page to the right hand.

Figure two represents the Book Monitor, with the right hand hands the book to the Pupil, who receives it in his right hand, with the back of the book to the left; and then passes it into the left hand, where it is held with the back upwards, and with the thumb extended at an angle of forty-five degrees with the edge of the book (as in figure 2,) until a further order is given.

FIGURE THREE—When the page is given out, the book is turned by the thumb on the side; and, while held with both hands, is turned with the back downwards, with the thumbs meeting across the leaves, at a point judged to be nearest the place to be found. On opening the book, the left hand slides down to the bottom, and thence to the middle, where the thumb and little finger are made to press on the two opposite pages. If the Pupil should have thus lit upon the page sought for, he lets fall the right hand by the side, and his position is that of Fig. 3.

FIGURE FOUR—But, if he has opened short of the page required, the thumb of the right hand is to be placed near the upper corner of the page, as seen in Fig. 4; while the forefinger lifts the leaves to bring into view the number of the page. If he finds that he has not raised enough, the forefinger and thumb hold those already raised, while the second finger lifts the leaves, and brings them within the grasp of the thumb and finger. When the page required is found, all the fingers are to be passed under the leaves, and the whole turned at once. Should the Pupil, on the contrary, have opened too far, and be obliged to turn back, he places the right thumb, in like manner, on the left-hand page, and the leaves are lifted as before described.

FIGURE FIVE—Should the book be old, or so large as to be wearisome to hold, the right hand may sustain the left, as seen in Fig. 5.

FIGURE SIX and SEVEN—While reading, as the eye rises to the top of the right-hand page, the right hand is brought to the position seen in Fig. 4; and, with the forefinger under the leaf, the hand is slid down to the lower corner, and retained there during the reading of this page, as seen in Fig. 6. This also is the position in which the book is to be held when about to be closed; in doing which, the left hand, being carried up to the side, supports the book firmly and unmoved, while the right hand turns the part it supports over on the left thumb, as seen in Fig. 7. The thumb will then be drawn out from between the leaves, and placed on the cover; when the right hand will fall by the side, as seen in Fig. 2.

FIGURE EIGHT—But, if the reading has ended, the right hand retains the book, and the left hand falls by the side, as seen in Fig. 8. The book will now be in a position to be handed to the Book Monitor; who receives it in his right hand, and places it on his left arm, with the back towards his body. The books are now in the most suitable situation for being passed to the shelves or drawers, where, without being crowded, they should be placed with uniformity and care.

In conclusion, it may be proper to remark, that however trivial these minute directions may appear to some minds, it will be found on experience, that books thus treated, may be made to last double the time that they will do, under the usual management in schools. Nor is the attainment of a correct and graceful mode of handling a book, the only benefit received by the pupil. The use of this manual is calculated to beget a love of *order* and *propriety*, and disposes him more readily to adopt the habit generally, of doing things in a methodical and systematic manner.

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